From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: 2 metre AM frequency?
Message-ID: <FABG2430.FABG2504@mail.admin.wisc.edu>

to: boatanchors@theporch.com

I believe that by past tradition the AM calling frequency was 145.400 MHz.

In Chicago we always did our own thing, so WE did it on 145.350!

Mr. T.

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: k1zat@bah.com
Subject: Re: 2 metre AM frequency?
Message-ID: <Pine.SUN.3.91.951013172349.13098D-100000@booz.bah.com>

> In Chicago we always did our own thing, so WE did it on 145.350!

146.535 works for me.

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: thaake@bsm2ee1.attmail.com (thaake)
Subject: RE:2M AM Freq.
Message-ID: <PMX-TERM-2.02-bsm2ee1-thaake-228>

RE: 2 Meter AM calling frequencies...

I'd like to know what is best for AM on 2M. Several years ago 3 locals dedided to blow the dust off of the ancient 2M rigs we'd been saving. We couldn't come to an agreement as to what freq. to use. At the time as I remember the ARRL band plan had no specific freq. listed for a calling freq.

but they did have a range listed for something like general use or whatever. If I remember correctly they defined the CW band, weak signal, general, and repeater freqs. We said the hell with it and used 144.15 (which I think is SSB or weak signal area (help me on this) for a few rag chews but gave it all up in trade for 6M because there were more locals that had 6 AM capabilites.

So a safe place on 2M was never determined. The old 145.350 rocks that we had from 30 years ago still perculate but we have repeaters within spittin' range on either side.

Anyway I'm back wondering again what to use. I have an SCR-522 close to being ready and it needs crystals for both the transmitter and receiver since they are both rock bound when used in their native mode. There is a tuning mod for the receiver but I don't want to hack it up.

Any ideas??

Tim WA0TSY
thaake@bsm2ee1.attmail.com

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: Ken Harrison <harrisok@SONOMA.EDU>
Subject: RE:2M AM Freq.
Message-ID: <Pine.PMDF.3.91.951013114757.1078141240B-100000@SONOMA.EDU>

On Fri, 13 Oct 1995, thaake wrote:

> RE: 2 Meter AM calling frequencies...
>
>
> I'd like to know what is best for AM on 2M. Several years ago 3 locals
> dedided to blow the dust off of the ancient 2M rigs we'd been saving. We
> couldn't come to an agreement as to what freq. to use. At the time as I
> remember the ARRL band plan had no specific freq. listed for a calling freq.
> but they did have a range listed for something like general use or whatever.
> If I remember correctly they defined the CW band, weak signal, general, and
> repeater freqs.

Hi Tim. Well, I posed a similar question locally here a couple of months back. I also checked with the local repeater coordinator. He suggested something in the 147 MHz simplex area. We have been scouting out a little used frequency in hopes of not aggravating local FM boys when they are unable to understand our conversations. ;-)

One of the locals found an article in an obscure ham magazine (I've foregotten the name) that seemed to push 147.52 for a national AM simplex

frequency. We decided that rather than interfere with two "channelized"
FM simplex frequencies, that we'd opt to just USE one of the
"channelized" FM frequencies. We were looking at 147.51 but have heard
too much activity on it in the distance. Possibly 147.525? We'll soon see.

We have about a dozen people locally who are "itchin'" to get the
Gonsets, Cleggs, Heathkits and Hallicrafters fired up. ;-)

73,
Ken

____
Ken Harrison   ---   harrisok@vax.sonoma.edu   ---   Amateur Radio: N6MHG
~~~~~~

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: zoom@willow.sps.mot.com (Chris Terwilliger)
Subject: RE:2M AM Freq.
Message-ID: <9510132047.AA03886@willow.sps.mot.com>

We use 144.4 and 50.4 here in Arizona....

chris

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: dmedley@indirect.com (David Medley)
Subject: 4-400A tubes FS
Message-ID: <199510111813.LAA08822@ns2.indirect.com>

I have 4 4-400A tubes to dispose of. They are unboxed but look good. I have
no means of checking them so any sale would be on condition the buyer can
test them and pay only if they test good.
Replies dmedley@indirect.com

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: steve@hi.com (Steve Byan)
Subject: Re: 6 Khz filters for Collins R 390's ?
Message-ID: <v02130508aca30a748b4c@[140.243.30.128]>

Hollow State News #30: "Collins Torsion Mechanical Filter for the R-390A"
~~~~~~

by Ralph Sanserino.
  adds 6 kHz Collins mechanical filter immediately after the 3rd mixer. Limits max bandwidth to 6 kHz (with 8 and 16 kHz filters selected, b/w is 6 kHz). Mod involves removing the RF chassis. Improves close-in dynamic range on non-xtal filter bandwiths. BTW, this article claims the R390A close-in dynamic range is significantly better on the 0.1 or 1 kHz CW bandwidths; it's reputation as having a high dynamic range apparently comes from measurements using these CW filter bandwidths.

This article also appeared in the National Radio Club's "DX News" Vol 61, No. 2.

Hollow State News #35: "R-390A Filter - Mod 2" by Ralph Sanserino.
  Mod 2 adds a 6 kHz LF-H4S ceramic filter (available from Kiwa) to the IF chassis.

Hollow State News #36: "R-390A Filter - Mod 3" by Ralph Sanserino.
  adds Kiwa 3 kHz filter module in place of 16 kHz mechanical filter (which is made useless by the previous 6 kHz filter mods). Very difficult mod. Dallas says: "Is this filter mod worth the effort? Probably not."

HSN back issues can be purchased for a check or money order payable to "Ralph Sanserino" for US$1.00 (USA, Canada, and Mexico) US$2.00 elsewhere per issue.

Hollow State News
c/o Ralph Sanserino
P. O. Box 1831
Perris, CA 92572-1831
USA

Steve Byan
Hitachi Computer Products (America), Inc.
1601 Trapelo Road
Waltham, MA 02154

internet: steve@hi.com

phone: (617) 890-0444
FAX: (617) 890-4998

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Bill Carver <bcarver@csi207.csi.cc.id.us>
Subject: 75A4
Message-ID: <Pine.3.87.9510101529.B28031-0100000@csi207.csi.cc.id.us>

Been the recipient of forwarded info on the 'A4. Since a Novice in 1958 I always wanted one: it was "the" receiver. Today I'm busily breadboarding a +50 dBm intercept synthesized receiver...a multi-year project. The 75A4

has sat unloved, unpowered for a long time.

It has "different" 15m band range, think maybe it originally was a MARS receiver? I got it w/o xtals, w/o filters. Bought a vernier knob for it, then a 500 Hz filter from W6OXP (now silent key) and wired R390 2 KHz filter to a plug (I know about filter blowby, ugh). It is hardly cherry.

WA6JYJ, who forwards boatanchor stuff to me, was interested in it. What's it worth?

73 - Bill K6OLG/7
bcarver@csi207.csi.cc.id.us

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: paul Veltman <veltman@netcom.com>
Subject: Re: 75A4 prices, Now how much would you pay?
Message-ID: <Pine.3.89.9510102044.A16595-0100000@netcom10>

Stan,

> You don't have to study the economics of this scenerio for long to realize
> that $1150 is probably not too much to ask for a mint 75A4.

I think that it's probably too much to ask by a factor of 3.

> 1) one that has been painstakingly restored . . . $1150 isn't bad. . . .
> 2) one that has been locked into a closet for 30 years in which case we are
> talking about a return on investment. Again $1150 is not out of line with
> only modest interest on the investment.
>
I don't think that we should confuse investments with boatanchors. If you want a guaranteed return on your money, buy Treasury Bills. "Investing" in old radios is pure speculation.

I buy these old radios because it is relaxing to take them apart and fix them up. I don't approach it with the thought of recouping my "investment" down the road. To be honest with you, I'd rather give some of these radios to novices than to sell them to some of the "collectors" I know.

Most of the boatanchors in my shack are used in my everyday ham activities. And they were purchased many years ago with that intent.

Anyway, enough of the sermon. I could rattle on for a megabyte or two,

but I don't think that I need to elaborate further on my thoughts than I have done already.

73

Paul WA6OKQ

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: jmz@monolith.cis.net
Subject: Amperex twin tetrodes for VHF/UHF use
Message-ID: <9510110301.AA23496@monolith.cis.net>

I am in search of an Amperex tube manual covering,in particular,the VHF/UHF twin tetrodes they made.These were used in mobile,marine,and avionic gear extensively.I would entertain buying any of the tubes themselves as well.

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: jcreid@CCGATE.HAC.COM
Subject: Another BA URL
Message-ID: <9509118134.AA813430986@CCGATE.HAC.COM>

I stumbled across this one the other night. An outfit called Western Electronic Surplus. Some BA's listed along with the solid state/Far East items. They are at http://www.westes.com/

-Jim N6SVS
jcreid@ccgate.hac.com

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: ARC-5's / Command Sets
Message-ID: <Pine.ULT.3.91.951010172518.6132C-100000@admin.aurora.edu>

Supposedly there were some ARC receivers made for the 9 to 18 MHz range but I have never seen one - has anyone else? I wonder how well they perform and would be interested in obtaining one if there are any around.

I have a fair collection of all the others. One was quite interesting

in that it had been reconditioned/rebuilt by the Canadian armed forces
in the 50's. All the original caps had been replaced with red plastic
tubular caps. THere was even a test results sheet inside the box.

Bob, K9EUI

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: w7ni@teleport.com (Stan Griffiths)
Subject: Auction Find
Message-ID: <199510110841.BAA22471@desiree.teleport.com>

I bought a bunch of Tektronix P6105 scope probes at an auction. Most of
them had broken tips, but they are replaceble if you know how. (I know
how!) So now I have several for sale.

Tektronix P6105 Probe

Connector type =3D BNC with readout (you can still use them on scopes wit=
hout
readout and you can use a UHF/BNC adapter)
Bandwidth =3D 100MHz
Vintage: Last appeared in 1984 Tek Catalog ($110 each). Replaced by P61=
05A
still in 1995 Tek Catalog ($175 each).
Attenuation =3D X10
Cable Length =3D 2 meters
Scope input pf =3D 15 to 47
Supplied accessories: Retractable hook tip. Ground lead with alligator =
clip.
No manual or instruction sheet.

I personally checked each of these probes for accurate X10 attenuation,
intermittant cables, and high frequency response.

These are great general purpose scope probes that can be used on most sco=
pes
except the very high frequency ones above 150 MHz or so. If you need
250-300 MHz probes, stand by for further announcements on this frequency.=
  I
got a few of them, too, but they are not checked out yet.

I want $25 each for these probes but I am only going to hold a narrow win=
dow
open since I have no idea what the demand will be. Perhaps large. This
offer expires October 15. If I still have some left, I will re-open the
offer. If I get more demand than I have probes, I will throw names in a =

hat
and draw them out until all probes are gone. I will let you know.

BTW these probes are too new to be considered BAs, I know, but since good
scope probes seem to be scarce on the used market and a lot of you guys u=
se
scopes in your shops to restore BAs, I wanted you to have the first shot =
at
getting them. Whatever I have left are going to a fealmarket with me in =
two
weeks.

Stan W7NI@teleport.com

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: Audio generated CW
Message-ID: <Pine.ULT.3.91.951010171326.6132A-100000@admin.aurora.edu>

SOme of the Heath rigs did the same thing, and I think maybe Drake
did too. They fed an audio tone into the speech amp and as long as
the carrier and other sideband were suppressed, it was clean A1.

My TS-930 does that for FSK mode. They divide a clock down and obtain
tones near 2125 / 2295 Hz for RTTY. I haven't looked but I assume they
are pulling the same stunt for CW.

Bob, K9EUI

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: pmills@cyberhouse.com (Phil Mills)
Subject: Re: Audio generated CW - 32S1,etc.
Message-ID: <199510102314.SAA01979@ns.cyberhouse.com>

Bob, thanks for your response....I suspect that is true in that
some of the Heath stuff seemed to be Collins clones.

Anyway, thanks to Stan and the others who responded. Now I know why
I have been "lucky" in the dx pileups....I've had more than one
signal working for me!

thanks to all,

Phil

>
>SOme of the Heath rigs did the same thing, and I think maybe Drake
>did too. They fed an audio tone into the speech amp and as long as
>the carrier and other sideband were suppressed, it was clean A1.
>
>My TS-930 does that for FSK mode. They divide a clock down and obtain
>tones near 2125 / 2295 Hz for RTTY. I haven't looked but I assume they
>are pulling the same stunt for CW.
>
>Bob, K9EUI
>
>
Phil Mills, AB5TH
pmills@cyberhouse.com
713-482-2763

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Steve Ellington <n4lq@iglou.com>
Subject: Re: Audio generated CW - 32S1,etc.
Message-ID: <Pine.SOL.3.91.951011081449.7504D-100000@iglou>

> >My TS-930 does that for FSK mode. They divide a clock down and obtain
> >tones near 2125 / 2295 Hz for RTTY. I haven't looked but I assume they
> >are pulling the same stunt for CW.

Never heard of Heath trying that. True about the 930, 940 on FSK only.=20
Not on cw though. Most of the FSK you hear these days is tone generated=20
anyway. The 930/940 produces very clean tones this way and has proven=20
much better than feeding tones into the mic jack. 73.=20

Steve Ellington N4LQ@IGLOU.COM Louisville, Ky=20

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: "Turini, Bill" <turinib@wdni.com>
Subject: BA Crystal Set for sale
Message-ID: <199510131547.AA05127@interlock.wdni.com>

I've dug down farther into my pile of junque and have made an interesting
find. A set of 10 FT 243 JAN xtals covering the 80 and 40 meter cw bands.
Frequencies are: 3505; 3510; 3530; 3690; 3695; 7005; 7010; 7015; 7030; 7035

KHz. They look new and would make a fine addition to a BA station. $25 shipped for the most interesting application.

Bill Turini KA4GAV/7 turinib@wdni.com
(206) 924-5890 work
(360) 825-1167 home

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: shaun.merrigan@freddy.com (SHAUN MERRIGAN)
Subject: BA Gifs, Tiffs, tga's
Message-ID: <8B2C525.0004024DB0.uuout@freddy.com>

Does anyone have, or can point me to BA Gifs (or some other format)? =20
You know, R390A, R388, SP600, 75A?, etc,

TIA.

shaun

Shaun P. Merrigan
merrigan@nyquist.ee.ualberta.ca
shaun.merrigan@freddy.com
3rd Year EE University of Alberta

=FE CMPQwk 1.42 856 =FEMental Floss prevents Moral Decay.

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: "Mark Glusker" <glusk@mechcad3.engr.sgi.com>
Subject: Books for trade
Message-ID: <9510131057.ZM15032@mechcad3.engr.sgi.com>

I have the following books for trade. All are in good condition unless noted. I would be interested in other old radio books or magazines from the '50's or earlier. I am not looking for anything fancy in exchange, just some new reading material.

1) Servicing Receivers by Resistance Measurement, 203pp, 1932, by John Rider

2) Simpson Model 270 Volt-Ohm-Milliammeter Operator's Manual, 40pp, 1959

3) Radio, 278pp, 1940, by John Langdon-Davies (very basic book about how radio works)

4) 24 Xtal Diode Applications, 48pp, 1951, by Sylvania Electric Products

5) TV Trouble Shooter, 64pp, 1953, by John Gardner

6) Surplus Radio Conversion Manual Vol. 2, 124pp, 1948, by Evenson and Beach (fair condition, one soldering iron burn inside)

7) Synchro and Servo Fundamentals Vol. 1, approx. 300pp, 1952, Bureau of Naval Personnel

8) Aviation Electronics Technician 3 & 2, 464pp, 1959, Bureau of Naval Personnel

Thanks,

Mark Glusker, glusk@engr.sgi.com

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: Jim Specht <specht@rb.unisys.com>
Subject: Broken slug adj.
Message-ID: <9510112141.AA18138@tedc>

I have an R-390A where the adjustment screw is snapped off. This is on the PTO in the small can adjacent to the tube. I looked inside the can and it is a small piston cap...I'm wondering if just the cap can be replaced (if I can figure out the size). Has anyone ever attempted to replace this guy? Any suggestions would be appreciated.

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: CAPCITANCE METER WANTED
Message-ID: <9510101533.AA00664@bock.ih.att.com>

Guess you didn't uload ALL your little parts :-)
You can get little digital cap meters pretty cheap -- I got a nice used one for about $50 at a hamfest couple years ago, later saw brand new ones at that fest for $40, so yes it can be done.

The old classic EICO/Heath bridges with th big dial and magic eye tube aren`t too hot down in the pF range, and the digital handhelds leave both hands free to twist the variable and watch the numbers.

The one I got reads accurately in-circuit unless the cap has a really

small shunt resistance (like a cathode bypass). It also reads high-voltage lytics quite well, even tho it doesn't impress any real voltage on them.

Make sure a meter has a zero-adjust control -- you can tune out the capacitance of the test leads and really got down into the single-digit pF range for those little trimmers. 73, mike k w9nrd

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Henry van Cleef <vancleef@bga.com>
Subject: Re: CAPCITANCE METER WANTED
Message-ID: <199510110602.BAA06364@zoom.bga.com>

As Michael.J.Knudsen@att.com said
>=20
> You can get little digital cap meters pretty cheap -- I got a nice used
> one for about $50 at a hamfest couple years ago, later saw brand new on=
es
> at that fest for $40, so yes it can be done.
>=20
> The old classic EICO/Heath bridges with th big dial and magic eye tube
> aren`t too hot down in the pF range, and the digital handhelds leave
> both hands free to twist the variable and watch the numbers.
>=20
My method is overkill, but it uses equipment on hand. And, sorry, folks, I don't do digital meters. I wouldn't trust one to be more accurate than the old analog stuff, no matter how many digits it displays. =20

Boonton 250A RX bridge. Round up a suitable coil, hang your cap across it at max pf, set the bridge at 0 capacitance and around 10K ohms and resonate the combination. Get the bridge nulled, then open the plates on your variable and dial in capacitance to re-null the bridge. One problem with the 250A is that it's maximum range is 120 pf. (null the bridge at +20 instead of 0, to get 20 extra pf.). If you need to measure a larger variable, you will need to set the variable under test to null the bridge at about 80 pf., then reset the bridge cap down to -20 and raise the oscillator frequency to re-null the bridge, then open up the cap under test some more.   The RX bridge resolves parts of 1 pf. accurately, so you can test fairly quickly and be more accurate than the original manufacturing tolerances by quite a bit. =20

You can also use a Q-meter similarly. With a Boonton 160-A, round up a suitable coil, hang around 100 pf. fixed across it (to avoid errors from self-capacitance of the coil), and resonate the coil, with your cap under test at max across the test coil. Find the peak by setting the Q-meter cap down toward the bottom, and trolling the frequency to hit resonance. Then open your cap and re-resonate the Q-meter, using

the Q-meter cap. The difference is the capacitance range of your cap. =20

To get the minimum capacitance, set up your test but leave a terminal
of your unknown cap disconnected, and resonate the setup. Then connect
your cap, with the plates fully open. The delta here is the minimum
capacitance. Make sure that you connect the normally-grounded part of
the cap to the LO terminal. =20

Obviously, the above are impractical unless you happen to have an RX
bridge or Q meter hanging around.   So I'll conclude with a slightly
more practical method. Get out your trusty grid dip (whaddya mean, a
boatanchor ham shack without a grid dip! Of course you've got a grid
dip!) and use the Q meter method above. A grid dip will read
capacitance in terms of frequency shift, and you'll have to recalculate
capacitance from frequency measurements. The formula for this, in the
form needed to get capacitance, is C =3D 25330/(F^^2*L), where C is pf.,
F is Mhz., and L is microhenries. Needless to say, with a grid dip,
you do not connect the coil and cap under test to the dip, but sniff it
with the dip probe coil. =20

--=20
****
Hank van Cleef vancleef@bga.com vancleef@tmn.com
****

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: dmedley@indirect.com (David Medley)
Subject: Collins Historical Photos
Message-ID: <199510110354.UAA27782@ns2.indirect.com>

When The Collins Radio Co was acquired by Rockwell International a lot of
Collins memorabilia was trashed. I was working for Collins at that time and
I recovered a bunch of very nice B&W photos of some of the Collins activity
in Cedar Rapids in the very early days. Included is what I imagine to be a
very rare photo of Arthur Collins Senior.
I have no more need for these and no place to preserve them. I do not want
to sell them but just to find someone who will have some real use and
appreciation for them.
Reply dmedley@indirect.com

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: "Steve Hose" <NUHOSE@befac.indstate.edu>
Subject: Re: Collins Historical Photos

Message-ID: <787636094@befac.indstate.edu>

> From: dmedley@indirect.com (David Medley)

> When The Collins Radio Co was acquired by Rockwell International a lot of
> Collins memorabilia was trashed. I was working for Collins at that time and
> I recovered a bunch of very nice B&W photos of some of the Collins activity
> in Cedar Rapids in the very early days. Included is what I imagine to be a
> very rare photo of Arthur Collins Senior.
> I have no more need for these and no place to preserve them. I do not want
> to sell them but just to find someone who will have some real use and
> appreciation for them.
> Reply dmedley@indirect.com
>
>
Dave,
I would be interested in seeing the pictures but, like the old
American Indian custom...if you save someones life, you are now
responsible for that person. What I am saying is that I would (as I
am sure other BA inclind Hams would be) interested in seeing them but
not responsible for them...as far as I 'm concerned they are a part
of a priceless heritage. Have you thought of polling the group and
seeing how many of us would be interested in copies and seeing if it
could be done at a affordable rate? Just a thought...
                    73,
                    de Steve KD1DT

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: dmedley@indirect.com (David Medley)
Subject: Collins Historical Photos
Message-ID: <199510131547.IAA25235@bob.indirect.com>

I have had an almost overwhelming response to my post re the Collins Photos.
I have committed to send these to one of the early responses but before I do
this I would like to know if there is anyone out there who could digitize
these for me so that others may be able to share these rarities? It was also
suggested that these could even be put onto a CDROM at a reasonable price.
Can anyone give me more details on this?
Reply dmedley@indirect.com

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: rdkeys@unity.ncsu.edu
Subject: Re: Collins Historical Photos

Message-ID: <199510131626.MAA03093@cc05du.unity.ncsu.edu>

> May I suggest that you have someone digitize the photos and provide a disk of
> them to those who can demonstrate a need. Anyone who wanted to use them in a
> publication would need digitized files anyway.
>
> Keep the originals in a safe place.
>
> Chuck
> WA7ZZE
>
> PS - I can digitize them if you like (no charge).
>

May I further suggest that boatanchorites, in general, assess what
historically interesting photographs they have in their archives and
perhaps, as a group effort, we could do a general historical archive
onto CD. A paragraph describing what it was and what was interesting
or historically significant about it before such information gets lost
forever, would make it a valuable asset to those of use that ply the
backwaters of history concerning our dear boatanchors.

I am sure there is some significant material about, but it needs a
general consensus/effort to try to bring something like this to
fruition.

Food for thought.

73/ZUT DE NA4G/Bob

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: penson <penson@geom.umn.edu>
Subject: Re: Collins Historical Photos
Message-ID: <199510111506.KAA19616@geom.umn.edu>

May I suggest that you have someone digitize the photos and provide a dis=
k of
them to those who can demonstrate a need. Anyone who wanted to use them i=
n a
publication would need digitized files anyway.

Keep the originals in a safe place.

Chuck
WA7ZZE

PS - I can digitize them if you like (no charge).

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Collins Historical Photos
Message-ID: <9510131827.AA02113@bock.ih.att.com>

I like Bob's idea of archiving photos onto a CD, or whatever.
Front-panel shots of classic gear are great, but why not go
beyond Moore's and show the significant insides of the set?
Under the NC-100 for the sliding catacomb, aniumated multiple shots
of the R390 slug rack, close up of the broadband CE final coils, etc.
And the 12-gang tuner on some Super Pros, a Johnson's roller inductor
turning along wiht the plate tuning cap, you get the idea.

Plus live "movie" of a seasoned HRO operator changing coil sets -- I
used to change bands on the RAS/HRO-Jr faster than I can crank the R390A between
ham bands today :-)

Maybe we could start making a list of "scenes we'd like to see."
73, mike k w9nrd

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: scott@hpislst.lvld.hp.com
Subject: Collins Pocket Guide and 75A-1 mech. filters
Message-ID: <199510111657.AA092890669@relay.hp.com>

Good Morning,

My Collins Pocket Guide arrived in the mail yesterday, and after
spending yesterday evening pouring over it, I'll certainly agree with
what others have already stated. This little jewel is very nicely done.
A must have for anyone interested in Collins amateur gear. My
congratulations to Jay, KK5IM, on a job well done.

As usual with this kind of book, it opens up almost as many questions as
it answers. In particular, in the section on the 75A-1 receiver he
mentions a set of plug-in mechanical filter adapters for the receiver,
offered in 1952 and 1953 apparently concurrent with the introduction of
the 75A-3.

Does anyone have any information on these adapters, specifically; are
they the same as those offered for the 75A-2, what were the part numbers
of the available filters, what were the bandwidths offered, and has
anyone ever seen these anywhere? Of course any additional information

would be appreciated.

Scott - who really likes his 75A-1 but isn't very fond of the ringy xtal filter.

Scott Turner KG0MR scott@lvld.hp.com

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: w7ni@teleport.com (Stan Griffiths)
Subject: Re: Collins S-Line
Message-ID: <199510102044.NAA16171@desiree.teleport.com>

>I've been using a 32S-1 over a year exclusively on cw and not had
>any bad reports regarding my signal.....
>
>Jay Miller's **Excellent** pocket quide does say that the method of
>generating the signal off of the audio tone created problems with
>zero beating.
>
>thanks,
>
>Phil Mills, AB5TH
>pmills@cyberhouse.com
>713-482-2763

The problem with generating cw the way Collins did it in the early 32S series is that it was done such that you are transmitting a single tone in the SSB mode. In theory, this should have the same RF spectrum as a normal keyed carrier but that assumes that the real carrier and the opposite sideband are adequately surpressed. There are adjustments and filters inside of the early 32S transmitters to assure carrier and unwanted sideband suppression. Like anything else, they can drift out of adjustment or otherwise go bad. When this happens, you have multiple signals coming out of the 32S spaced apart on the band by an amount equal to the audio frequency being keyed. I have heard this on the air and it is pretty obvious what is happening. I remember initiating a cw QSO with one guy who had this problem and I called him and said "Hey, your 32S1 needs some internal adjustment to suppress the carrier." He couldn't quite accept that I could tell he was using a 32S1, but I could, and he was.

There are a lot of 32S1s that never get out of adjustment and work great for years, and there are a few that need some work. It may be a simple adjustment is all that is needed.

Here's one for you. Those of you that are familiar with what I am talking about may recognize that generating cw in this manner is really old "A2" type emission, I believe, which was illegal to use in the cw bands at that time. Since then, the emission types have been revamped and so have the rules so I don't actually know if it would be legal or not today. Technically, I believe that new 32S1s were not legal to use on cw, but that is only my opinion and I don't think it was ever made an issue . . .

Stan W7NI@teleport.com

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Collins S-Line
Message-ID: <9510101943.AA00930@bock.ih.att.com>

The KWM2 also uses an audio sine (?) wave to fake it on CW.
Can I expect this rig to have poor CW performance? And in what way?

Time to get the Viking II running....73, mike k w9nrd

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Steve Ellington <n4lq@iglou.com>
Subject: Re: Collins S-Line
Message-ID: <Pine.SOL.3.91.951011075646.7504A-100000@iglou>

> The KWM2 also uses an audio sine (?) wave to fake it on CW.
> Can I expect this rig to have poor CW performance? And in what way?
>=20
A lot of the older S lines I have heard on cw have a very soft, hollow=20
sound to their keying. Some which didn't have their carriers nulled=20
produced superious signals near the "carrier" frequency. Others seemed to=
=20
develope some hum around the carrier. Just imagine listening to someone=20
who had their mic button pushed but was not modulating. On these older=20
rigs, you usually could hear some kind of garbage even if it was=20
suppressed 30db down! I remember hearing my first 32S1 and was really=20
amazed that Collins could make a cw signal sound so bad. It's a shame too=
=20
because their vfo was so stable and clean otherwise.=20

As for "getting out the Viking 2", those had a bad case of key clicks=20
unless the vfo was left on and the transmitter only was keyed. I used one=

=20
between 1986 and 1988 as my only transmitter and got a few OO reports. I=20
keyed the vfo and tx together for QSK.=20

Some of the cleaner keyed transmitter from the old days were the.

B/W 5100
Heath Apache
Lakeshore Phasemaster
Johnson Ranger
All Drakes
Heath HW16 (very good keying and QSK)
and a lot more. But many were'nt fit for cw and still are not unless=20
modified.=20

Steve Ellington N4LQ@IGLOU.COM Louisville, Ky=20

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Drake (2-C) caution
Message-ID: <9510101626.AA00745@bock.ih.att.com>

Heh heh. SOunds a lot like why my SP600 went dead recently.
And I even carefully rotated that Xtal switch in the upper right all
the way to the left.

Or so I'd thought. It takes extra torque effort to put it to the
leftmost position -- the position that pushes the link bar inside and
returns control of your tuning to you! The second time, I twisted
it extra hard and presto -- instant SP600JX.

SX-117 also has a trick xtal switch, but not as tricky :-) 73, mike k w9=
nrd

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: cdorn@gpu.srv.ualberta.ca (Chris Dorn)
Subject: Drake Stuff FS
Message-ID: <199510131730.LAA14630@bock.ucs.ualberta.ca>

Hello,
   I have the following Drake gear for sale:
1. RV4C Remote VFO - Excellent Condition, no manual, $100US.
2. AC4 Power Supply - $65US.

3. MS4 Speaker - V. Good, 40US.
4. TR4 Transceiver - Project or Parts radio, no finals, RX with "constricted audio", don't know about TX, cosmetically V Good, cabinet repainted, manual - Offers.
All the above you ship.
Chris VE6RDC

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: "Seifert, Rick" <rseifert@usia.gov>
Subject: Drake SW-4A story
Message-ID: <42B27A30013CD8D1@usia.gov>

The Drake SW-4A asked about awhile back has an intersting history to it. I've just written an article (due out next spring) which explains, but here's a thumbnail summary.

The SW-4 and SW-4A were the first SWBC receivers out of Drake. The idea for the radios came from Arch Madsen, the GM of WNYW shortwave, New York City (transmitters Scituate, Mass). WNYW (then WRUL) was purchased by the LDS church (the Mormon church) in 1962 as it's first venture into international commercial shortwave radio. Part of the effort to promote the station was the belief that more people would listen if a simple radio was available.

Madsen approached Bill Drake about the possibility of building this easy to use receiver. You'll notice the WNYW logo on the front panel. This was part of the agreement between Drake and WNYW. Drake got free promotion over WNYW, WNYW got free promotion via it's logo on the radio.

The color coding on the Band Switch and Pre-selector dials was Madsen's idea. In fact, he pretty much laid out the specifications the radio was to have. Madsen was an engineer in his own right.

There were only 600 or so SW-4's produced before the changeover to the SW-4A. Several thousand SW-4A's were made.

This remains an excellent SWBC receiver, and is still in wide use amoung the SWL set (at least, those that appreciate this type of rig). Of course, I'm a bit biased, since mine glows everyday!

Rick Seifert
Office of Cuba Broadcasting
Radio Marti Technical Operations
Washington, D.C. 20547
rseifert@usia.gov
(202)401-7104

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Grant Youngman <gyoungma@gtetel.com>
Subject: E-V 664 Pinout/Info
Message-ID: <Chameleon.951010184518.gyoungma@gyoungma.gtetel.com>

Fellow BA'ers ..

I have acquired a nice looking Electro-Voice 664 mic. Does anyone have any
info on the connector pinouts and impedance of this thing??

Thanks .. Grant/NQ5T

Grant Youngman -- NQ5T

Once upon a time (and maybe again): K5VCM
  and for a while W0JXE, KH6HHC, WB4BBD

gyoungma@gtetel.com

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: "Cal J. Eustaquio" <ceustaqu@violin.aix.calpoly.edu>
Subject: Re: E-V 664 Pinout/Info
Message-ID: <Pine.A32.3.91.951012033324.35290C-100000@violin.aix.calpoly.edu>

Grant:
When you get the info, could you foward me the pinouts too? 73's. Cal.

On Tue, 10 Oct 1995, Grant Youngman wrote:

> Fellow BA'ers ..
>
> I have acquired a nice looking Electro-Voice 664 mic. Does anyone have any
> info on the connector pinouts and impedance of this thing??
>
> Thanks .. Grant/NQ5T
> ---
> Grant Youngman -- NQ5T
>
> Once upon a time (and maybe again): K5VCM
>   and for a while W0JXE, KH6HHC, WB4BBD
>

> gyoungma@gtetel.com
> ------------------------------------
>
>
>

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: pbock@melpar.esys.com (Paul H. Bock)
Subject: Edison battery oil - an update
Message-ID: <9510112049.AA11169@syseng1.se.melpar.esys.com>

I posted my query about what this stuff was (with full description of the bottles and the liquid inside) on rec.collecting, and here's a sampling of some of the responses I got:

1. The bottles are worth ($1)($3)($5)($10) each (pick one). I was offered $1 and $2 for empties, and $5 and $10 for full ones "just to take them off my hands."

2. The bottles with liquid in them are actually:

   (a) Special batteries used with old-time radios before people had AC power.

   (b) Bottles with liquid in them.

3. The liquid in the bottles is:

   (a) Unknown

   (b) A special electrolyte rejuvenator for alkaline-electrolyte batteries.

   (c) A dangerous oil compound containing highly toxic, cancer-causing PCBs which must be stored outside, in a closed box, on a high shelf.

   (d) A mild acid used to recharge old batteries used in the days before people had AC power.

   (e) Sulphuric acid.

The only other answer was "I don't know, but maybe I can find out." *NO ONE* gave the answer, "Mineral oil or something

similar to prevent evaporation from nickel-iron-alkaline Edison cells."

I particularly liked 3(c), given that the bottles are completely sealed.....you'd think the stuff was radioactive, fer cryin' out loud!

73,

Paul, K4MSG

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Rick Robinson <rerobins@uncc.edu>
Subject: EICO manuals needed
Message-ID: <199510111321.JAA10012@mail.uncc.edu>

I need the following EICO operation manuals and schematics, copies OK. I'll be more than glad to pay for copying and postage.

EICO 147A signal tracer
EICO 710 Grid Dip oscillator.

Thanks in advance,

Rick Robinson KF4AR
rerobins@uncc.edu

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: bill@texan.frco.com (William Hawkins)
Subject: electromechanical marvels
Message-ID: <9510110421.AA02414@texan.frco.com>

About 10 years ago, I picked up a 300 pound disk drive and a 150 pound line printer. The disk drive has a servo with a 2 inch stroke and a 50 pound magnet. It is time to pass these on to someone else. The equipment is free. Manuals are $20 for each device. You ship, or pick up in Bloomington, Minnesota.

Of course, I expect this to draw as much interest as a pallet of KSR-33 teletypes, but I thought I'd give you all a chance at some _real_ boatanchors at attractive prices.

Bill Hawkins bill@bvc.frco.com 612 895-2085 Minneapolis, MN USA

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: Bruce Haffner <haffner@mcs.net>
Subject: ELGIN RADIO MEET
Message-ID: <Pine.BSI.3.91.951011215848.11492A-100000@Venus.mcs.com>

The Elgin, Il. autumn meet will be this Sunday at the Holiday Inn, I-90
& route 31 starting at 8 a.m.
I will be on 147.51 Mhz.
                              Bruce   WD9GHK
                      haffner@mcs.com

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Fair Radio R-392's
Message-ID: <9510101556.AA00704@bock.ih.att.com>

Thanks Randy for the nice comments.
Let me say that the engraving on my R392 panel is not as deep as on, say,
some R390As. A cross section of the engraving groove would be a shallow
arc of a circle, not the rectangular cut on some R390As.
It should be deep enough to allow for a careful repainting, but you'll have
to be more carefull wiping off the excess white pain after filling the groove.

Neat idea to build the rectifier into the homebrew SS module, but you're
restricted
to half-wave (one diode), so you'll need a BIG electrlytic in there.
I'd still go with rewiring the socket (poor if you ever want to use the 26A7 tube)
or just get a 28 VDC supply. You can scrounge the parts to build one pretty
cheaply, and if you can homebrew the module you can certainly bew the DC supply.

If you build a speaker/PS box, you could also toss in a booster audio amp too --
maybe one of those automotive jobs. Shake the whole block with Radio France!
73, mike k w9nrd

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: First International Boatanchorite Hartley Oscillator Rally
Message-ID: <9510131801.AA101033@csemail.cropsci.ncsu.edu>

>
> to: boatanchors@theporch.com
>
> Hello Bob, et. al.
>
>   Hey, a Hartley rally sounds like a good time! I've gotta couple of stray
> UX-210s floating around, as well as a slab of pine to stick 'em on, and a hunk
> of copper gas line for a tank coil.

Sounds great!

UX-210's are the prime historically accurate valve to use.

1/4 in copper tubing for the tank coil is historically most appropriate,
although I get good mileage out of bellwire or no. 14 black household
single strand copper wire. The important point is to keep it firmly
in place and don't push more circulating currents through it than the
parts can handle.

>   BTW, for those who REALLY wanna get into this, I'm looking over an article
> here at work tonight that's right up the same alley.
>
>   If you can get hold of it, check out the June, 1972 issue of CQ Magazine
> (page 14); "A Modern 2-Tube Receiver To Meet 1931's Strict Operating Stand-
> ards", by Bill Orr, W6SAI!

That was a very nice little article. Technically correct, and with a slight
bent for the tongue-in-cheek.

>   He's showing a neat little type 24 regenerative detector, followed by a
> type 27 audio stage.

The 24 detector is one of the best. The 27 audio is likewise one of the
best. These days, I would opt for a 6K7 and a 6J5 for more common types.
The metals are considerably more common and they can use a common
industrial breadboard relay socket of the octal type with wire screw
terminals.

>   This thing's a legit construction project, complete with winding instruct-
> ions for plug-in coils for 160, 80, 40, and 20 metres. Ol' Bill has the tongue
> planted firmly in his cheek; "...The receiver even works well on the ultra
> high frequencies, such as the unexplored 10 meter amateur band.", but even so
> this little box has made it to my "must try" list.

Like I said, it is great!

>   BTW, he admits that much of the info was lifted from "A Two Tube A.C.
> Receiver" by George Grammer, from the December, 1930 issue of QST.

Yes. Uncle George's construction articles of the period are prime required boatanchorite reading. Everyone should lay hands on as many of his articles as they can for their plain basics.

In the early 1920's there was a similar set of QST articles known as ``The junior operator's'' column, that are some of the best places to pick up hints and ideas, even now. More recommended reading.

> I can't think of a more fitting companion to a Hartley rig than this little
> inhaler.
> 73's,
> Tom, K9TA

Well said! For the fun of it I will include some more information on these early bottleburners from a lecture I gave to our local radio club a few years back. I have no way to reproduce the drawings and pictures here, but might xerox a few if needed.

Happy reading/Bob/NA4G

****

THE JUNIOR OPERATOR'S GUIDE

TO

SIMPLE 1-TUBE HARTLEY OSCILLATOR TRANSMITTERS

A Practical Compendium
of
All That Junk You Might Want To Know

BY

ROBERT D. KEYS/NA4G

Boatanchorite On-Line Edition Of
12 October, 1995.

This work is an addenda to a presentation by Robert P. ``Tim'' Buehlmann (N4IQA) and Robert D. ``Boatanchor Bob'' Keys (NA4G) to the Homebrew Special Interest Group of the Raleigh Amateur Radio Society (RARS) given in a lecture on 26 June, 1991, in Raleigh, North Carolina.

The following document contains excerpts taken from numerous sources. Where possible, full citation of said sources in given. Where not possible, as full a citation as possible, based upon the author's existing information is given.

HISTORICAL

The Earliest Days

Way back in time, in a place far, far away....., when sparks flew the ether and vacuum valves were barely usable scientific curiosities, a happening occured it the cloisters of the General Electric Company (Loomis, M.T., 1925, Radio theory and aperating, Washington, DC, Loomis Publishing Co., p. 355). A new dawn in the age of radio transmission was beginning, that would last even unto today. Mr. R. V. L. Hartley invented an oscillating valve circuit that came to bear his name, the ``Hartley oscillator''.

Mr. Ralph Vinton Lyon Hartley was born in the wild west, in Nevada, in 1888. By 1909, he had graduated from the University of Utah, and had the good fortune to become a Rhodes Scholar, continuing his studies at Oxford and obtaining advanced degrees in 1912 and 1913. When he returned to the United States, he went to work in New York City in the research laboratories of Western Electric (ref: Brittain, J.E., 1992, ``Scanning the Past'', ``Ralph V.L. Hartley'''', Proc. IEEE 80(3):463.). Apparently, Loomis and other writers of the early 20's had the company name wrong. Mr. Hartley began work at Bell Labs in 1925 at its inception and remained there until his second retirement in 1950. He passed away in 1970. Among other things, he was noted for important work in single sideband suppressed carrier telephony back in the early 1920's and published a paper on the subject in the Proc. IRE, in 1925.

The work on his famous oscillator design took place in

1915, at which time the practicalities of working circuits were finalized. Although his colleague, H.J. van der Bilj, in his classic work, ``The Thermionic Vacuum Tube and Its Applications'' does not specifically mention much in the way of the design, it is mentioned there briefly and a theoretical diagram of the circuit is given. But, it seems that the name of Hartley did not really begin to be associated with the inductive feedback oscillator circuit using a single tapped coil, until the early 1920's, about 1922 or 1923, in QST and Radio News. But, by 1924, the name of Hartley had become a household word in most amateur radio shacks. It was to reign supreme amongst single tube transmitter circuits until the early 1930's. The earliest clearly Hartley oscillator circuit that this writer has been able to find in the popular radio press, after van der Bilj's work, was in the I-Want-To-Know column of Gernsback's Radio News, April, 1921, p. 707. In that one little diagram, the clear essence of the classic Hartley oscillator is found.

The principle feature of the Hartley oscillator is that the feedback is obtained by an RF voltage divider made from a single tapped inductance coil. This is often called ``magnetic coupling''. This is in contrast to the ``Colpitts oscillator'' invented by Mr. E. H. Colpitts, also an engineer of the General Electric Company (according to Loomis --- probably it was again a mistake in the company name and should be Western Electric), which uses a capacitive RF voltage divider or ``capacitive coupling''.

The principle forms of the Hartley and Colpitts oscillators are shown in Figure 1.

(Figure 1 omitted here.)

The principle forms of Hartley (top) and Colpitts (bottom) oscillators (after E.E. Burns, 1938, Radio --- A Study in First Principles, 3rd. ed., New York, D. Van Nostrand Co., Inc., pp. 210, 213).

Hartley oscillators were fairly common in early shipboard tube transmitter installations, but were soon replaced with multi-stage transmitter designs, in which the oscillators were still often of the Hartley type. It was in the amateur circles that the Hartely oscillator was to become KING.

Real Beginnings in the 1920's

The use of vacuum tube oscillators in amateur hands did not really begin until about 1920. Prior to that time, tubes were hard to find, and extremely expensive. After that time, production began to increase, with tubes becoming more widely available and somewhat less expensive.

Typically, amateur transmitters used the venerable type '01A and the early Western Electric telephone repeater tubes of types J and M. The '01A tube was good for about one watt input, while the J and M tubes were good for about 5 watts input.

About 1925, the venerable type '10 tube became available to amateurs. It rapidly became the standard low power ``5 watt'' oscillator tube and was used in many, many Hartley oscillators.

Amateurs requiring more power, up to perhaps 50 watts input, used the '11 type tube. Although not too common, some well-heeled amateurs used the 250 watt '04a type tube and some of the large Western Electric bottles.

Mostly, these low power transmitters used type `10's and whatever could be lashed up for a power supply of several hundred volts at a few milliamperes.

During this time, low power transmitters were often directly coupled to the antenna. About 1925, such coupling was outlawed. Inductive coupling with antenna tuning became the ``de facto'' standard antenna coupling design.

Several good reference articles were published in QST on the design and care and feeding of the Hartley oscillator transmitter. A very good one that is simple to understand is in one of the early Junior Operator columns (Mason, H.F., Some points on tube transmitters --- 1, QST, November, 1923, p. 52.). Another, on the derivation of the practical Hartley transmitter is by the venerable QST Technical Editor, R.S. Kruse (Kruse, Robert, S., How our tube circuits work, No. 1, The Hartley circuit, QST, December, 1926, p. 9).

The Definitive Form of the Hartley Oscillator Transmitter --- The High-C Hartley Circuit

In 1928, amateur regulations became somewhat more strict than had previously been, with requirements for new bands, new calls, and better frequency stability. At this time, the technical department of QST, through much good direction under that quintessential amateur experimenter, the then Associate Technical Editor of QST, Ross Hull, undertook work to redesign the amateur transmitters of the day to meet ``1929 type'' amateur requirements. The fruits of their labors brought forth the design of the classical amateur Hartley oscillator --- the High-C Hartley.

Quoting from ``ye Editor'' of QST in that fateful August, 1928, issue:

> ``Forseeing the inevitable change in operating conditions in 1929 and appreciating the urgent need for modification and improvement of amateur equipment, the A.R.R.L. Board of Directors appropriated a sum from the League's surplus for the conduct of a program of investigation and development of amateur transmitters and receivers. This article embodies the conclusions resulting from the first phase of the program work --- a study of self-excited transmitters. It is, we feel, one of the most important articles ever published for the radio amateur. Let every amateur study it most carefully, and apply its information, for it contains salvation for 1929. --- Editor.'' (Hull, Ross A. 1928. Overhauling the transmitter for 1929. Some modifications which permit substantial advances in self-excited circuit performance. QST, August 1928, pp 9.)

This issue spelled the death-knell for poorly built, haywired sets, that were the norm in the early 1920's. Instead ``1929 style'' or ``1929 performance'' became the buzzwords of the day. The High-C Hartley oscillator was the salvation of the day.

The High-C Hartley oscillator is characterized by having a very heavily constructed coil of few turns (usually no more than a dozen on 80 meters). Also to compensate for the decreased inductance of the coil, a much larger capacitance (at least 500 and usually more than 700 picofarads at 80 meters) was used. Smaller capacities and inductances were used on higher bands, in proportion.

In this High-C design, there are very large circulating tank currents. This necessitates very rigid construction with large conductors and solid, heavy connections. Tuning coils were routinely made of 1/4 inch or larger diameter copper tubing. All components were mounted as close together as possible. The use of glass or ceramic insulating pillars and mounts for coils was imperative. Clips for connections to coils were ``verboten'' except for low current points such as the cathode tap or the antenna loading coil tap. Screwed/bolted connections were preferred. If the connections were not up to par, it was not unusual for the connection point to literally melt (if soldered) or heat to a very hot temperature. (After all, industrial RF heating as well as microwave cooking use the same principles!!!) Instability of signal was a sure indicator of such impromptu RF subtleties. One of the large transmitters under test by the ARRL melted its sweated solder joints on the coils from heating due to high RF circulating currents.

If all went well in the construction of the ``1929 style'' Hartley oscillator transmitter, the signal put out was considered excellent in its day, and is not bad even by today's standards.

It was almost manditory, though to have some form of key click filtering in the rig. Usually a choke coil of a few henrys inductance in series with the key line and a parallel capacitor of a microfarad or two across the key would cure key clickitis. Numerous articles and hints and kinks were suggested in those years, but the basic series choke and parallel capacitor is still in use, even today!

Fading into the Sunset

After about 1935, the single tube oscillator transmitter of variable frequency design gradually fell into disuse. Most amateurs were using crystal control, and at least a two stage transmitter. Stability became paramount, at the expense of frequency variability.

Except for occasional emergency or portable rigs, the venerable Hartley oscillator had faded from the scene. The only great use of the Hartley oscillator, after that time, was in the low power oscillator stage of a VFO and in heterodyne oscillators in superheterodyne receivers.

PRACTICAL HARTLEY OSCILLATOR TRANSMITTERS FOR AMATEUR USE

The Simplest Practical Hartley Oscillator Transmitter

The simplest practical Hartley oscillator transmitter is shown in Figure 2. This is the design characterized by direct antenna coupling, as used up to about 1925. Using inductive coupling instead of direct coupling would modify the design to make it slightly more complex, but much more tenable by today's and post 1925 standards (Figure 3).

(Figure 3 omitted here.)

The simplest Hartley oscillator transmitter (after Radio News, April, 1921, Vol. 2(10), p. 707.).

(Figure 4 omitted here.)

The simplest practical form of Hartley oscillator transmitter. Note that the antenna is NOT directly coupled to the tank circuit, but IS inductively coupled to a resonant antenna circuit.

This simple form of Hartley oscillator does not have a grid leak and grid condenser. Care must be made in the application of high voltage to the tube in order to prevent overloading the plate current. Without the grid leak and grid capacitor, no bias is derived on the grid. Hence, the tube will operate at much lower voltages and with much greater plate current than one might expect. The voltage should NEVER be run higher than about 100 volts on a receiving type tube or 200 volts on a 5 watt tube or 300 volts on a 50 watt tube. To do so is asking for trouble, unless extreme measures are taken in the construction and operation of the rig to keep things firmly in control. If in doubt as to the maximum voltage for a particular tube, consult the tube charts for the curve of plate current with zero bias volage. Find the rated plate current max for the tube, and read off the maximum safe plate voltage. Or, as a ``real experimenter'' would do it, short the grid to cathode and

measure the plate current vs. plate voltage and find the maximum safe plate voltage experimentally.

With this design, NA4G has successfully worked Canadian stations from North Carolina on 80 meters with an output of only 1 watt to a 50 watt bottle at 100 volts on the plate. With 350 milliwatts output from a 5 watt bottle at 100 volts, stations as far away as New York City were worked. Stability, using batteries for plate voltage and with CAREFUL antenna tuning and loading IS AS GOOD AS ANY MODERN TRANSMITTER.

Many different types of vacuum tubes can be used in Hartley oscillators. Preferred types are triodes, but even tetrodes and pentodes can be wired up with all of the grids tied together to make a ``triode''. For low power transmitters, tubes such as the 12AT7, 6/12SN7, 6AS7, 6080 amongst the dual triode types work well. Tubes such as the 6J5 or 1626 also work well. If the tube has two triode sections, wire them up together in parallel so that one triode is obtained. Classical tubes such as the `01A should be used sparingly. Remember that they are very scarce these days and should be reserved for restoration or special use only. For medium power transmitters, tubes such as the 100th, 211, 801, 2A3, 6A3, and 811 work well. Again, classical tubes such as the '10 and the 211 should probably be used sparingly. Even a junk 833A could be pressed into service, provided you did not try to run the full KW input with it! At 5-10 watts for playing around with, it will work great.

It is preferrable to use batteries as the filament and plate supplies. Batteries are more current/voltage stable than the usual power supplies that can be obtained for high voltage or filament voltage. Although filaments can be run from an AC transformer, it is almost impossible to get all the raw-AC hum modulation out of the pure CW note.

The Classical High-C Amateur Hartley Oscillator Transmitter

The classical High-C amateur Hartley oscillator transmitter is epitomized in the 1928 volume of QST (August, 1928, p. 9). There was a whole series of such High-C transmitters from low to high power, published in the 1928 and 1929 volumes, and the Hartley oscillator design is indeed a classic.

A representative example of this design is shown in Figure 4. Note that the construction is characterized by rigidity and robustness. Also, loose coupling or minimum coupling, much less

than critical coupling is used, in order to increase stability.

(Figure 5 omitted here.)

The classical form of High-C Hartley oscillator (after QST, August, 1928, p. 9).

(Figure 6 omitted here.)

The classical form of High-C Hartley oscillator (back view).

(Figure 7 omitted here.)

The basic circuit of the classical form of High-C Hartley oscillator.

Putting a Hartley Oscillator Transmitter On the Air

Operating a Hartley oscillator on the air can be a VERY interesting experience. Several things must be kept firmly in mind, though.

First, make sure you have a very solid stable power supply. Poor power supplies make for great chirping yoops and whoops out of your Hartley oscillator.

Second, make sure you tune the output circuit to a slightly higher or lower frequency than that of the oscillator tank, and DO NOT over-couple the antenna to the oscillator tank. Find out which is more stable, the higher or lower frequency. Failure to do this WILL invite every OO in the region to give you a report, and possibly even the FCC to give you a pink ticket!

Third, make sure you properly load the rig only to about 33 percent full output. This will give good efficiency AND good stability. To properly load the rig, tune the oscillator tank to the desired frequency. Then tune the antenna to resonance as indicated by maximum output on a field strength meter or antenna

current ammeter. Then increase coupling from the antenna circuit to the oscillator tank circuit until a maximum is reached. This represents a severely over-critical-coupled condition, and the rig should not be operated long in this way. Then, decrease coupling until the field strength meter of the antenna current ammeter reads approximately 33 percent of full output. At that point, it will be CORRECTLY loaded into the antenna.

Fourth, the recommended antenna system for a Hartley oscillator inductively coupled to a resonant antenna circuit is a quarter wave grounded Marconi antenna, with or without a quarter wave counterpoise. This is a good general purpose antenna. It should be possible to feed a coaxial fed dipole with the same system. If an end fed Hertzian antenna is used, the antenna tuning tank circuit should be a parallel tank instead of a series tank with the antenna connected at the high voltage point.

APPENDIX OF USEFUL TIDBITS OF MISCELLANEOUS INFORMATION

The following pages contain diagrams, figures, and other sorts of information that might be useful in your design and building of an amateur radio Hartley oscillator transmitter. These tidbits of information have been excerpted from various sources, as noted.

(Sorry fellow Boatanchorites, but the tables and figures here are just not amenable to straight ascii representation. I you are interested in the appended information with tube charts, etc, contact me via email at rdkeys@unity.ncsu.edu or by snailmail to the callbook address of NA4G. There are about 75 additional pages of information.)

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: rdkeys@unity.ncsu.edu
Subject: First International Boatanchorite Hartley Oscillator Rallye
Message-ID: <199510111524.LAA29409@cc05du.unity.ncsu.edu>

Fellow Boatanchorites:
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D

Thinking about a very simple Hartley oscillator rig for the First

International Boatanchorite Hartley Oscillator Rallye, on the bench last night, I whipped up a simple 4x6 inch piece of black 1/4 inch plastic with 4x6x1/4 inch black plastic front panel and plopped an octal socket thereupon (superglued of course). Added a 1 inch dia. plastic coil with 20 turns of bell wire, tapped about the middle, a 150pf grid blocking cap with a 1 meg 1.4 watt grid leak, a 0.1uf key bypass cap and a similar cap and rf choke to keep the battery leads rf free, and away the little beastie went. I tried several generic dual triodes (6SN7, 6SL7 [their computer mil counterparts of the 5000 series tubes], a 6080, a 6AS7, and one or two others that I don't remember right off). The thing worked with all of them, and put out the most power with the 6AS7 as the oscillator. Both triodes were wired in parallel. (FYI black acrylic and superglue make great BA playthingies for making breadboard rigs.)

Here are the measurements I made with the thing with the 6AS7 tube.

12 vdc plate voltage @ 2.5ma plate current =3D=3D 30 milliwatts plate inp=
ut.

24 vdc plate voltage @ 5 ma plate current =3D=3D 120 milliwatts plate inp=
ut.

36 vdc plate voltage @ 7.5 ma plate current =3D=3D 270 milliwatts plate i=
nput.

48 vdc plate voltage @ 10 ma plate current =3D=3D 480 milliwatts plate in=
put.

I did not run it higher, but my guess is that it should give maybe
2 watts input on 96 vdc plate voltage @ 20 ma plate current.
Somewhere around 67.5 volts and around 15 ma should give around 1 watt.
The tube is merely idling at those specifications.....(:+}}.....
That should be sufficient for lots of Boatanchorite fun in the wee small hours on the 80 meter QRG in the quiet winter time on watch.

So, a simple 20's style BA breadboard Hartley oscillator is a piece of cake, even if a plastic breadboard and a ``modern'' tube is used.
It took maybe an hour to drill and whittle the plastic and mount the parts. It is a haywire job, but at least there is a real terminal strip for mounting up the power cable, and a fone jack for pluggin in a key.
Good old pushback bellwire was used throughout, even for coil winding.
Handy stuff to have around, that bell wire.....

The antenna tuner was built onto the rig, also, using a 3 turn link to the tank coil and a 50 turn 1 inch dia. antenna coil and 250 pf small variable cap for the antenna tuning cap as a parallel Hi-Z tank with the antenna off the top and the bottom to ground. Worked fine.

The link was made sliding so the coupling could be adjusted from
touching to about 1 inch spacing. Cheap plastic tubing was used for
the coil form, although my preference for emulation of bakelite is
good ol' black hardware store PVC pipe (or whatever the chemistry of
that stuff is). A clear pine or maple baseboard would have been much
nicer but the black acrylic stuff worked well and simple stickon rubber
feet made it tabletop safe.....(:+}}.....

Of all the different tubes tried, the 6AS7 was the most stable, probably
due to electrode construction and bracing. After trying about a dozen
6/12SN7 tubes, I found two that were quite stable. The rest were so-so.

I also found out a very interesting thing when keying the beast with a bu=
g.
The differential capacitances and resistances of the electrodes of the bu=
g
cause different frequencies to be emitted when ditting or dahing. The
frequency varied about 100 cycles depending upon whether dits or dahs wer=
e
being played. So, the cure was key it with a small relay that presents a
constant load resistance/capacitance, and the thing was stable as most
60's novice xtal rigs --- body capacity aside when tuning.....(:+\\......

I made one qso with it with a local, and he gave me a 599 report when
an antenna was hooked up and a 339 report with no antenna hooked up
(only the ground lead to the workbench ground being hooked up).
The plate input power to a 12SN7 was 48vdc at about 3ma or maybe in
the neighborhood of a whopping 150 milliwatts!

So, fellow Boatanchorites, I will throw down the gauntlet, and herewith
put forth a basic invitation to the First International Boatanchorite
Hartley Oscillator Rallye (or ``Hartley Happening'' for short as Bobbi
was want to say).

The rules are simple.....

1. Use any sort of basic single tube 1920's style (preferrably ``1929
    style'' to keep Ross Hull [rip] and T.O.M. [rip] happy and not due
    forthwith with another tirade and epistle to the young squirt!).
    A Hartley is preferred, although a goodly and well proportioned
    TNT (a favorite of my OM back in the early 30's) or TPTG or even
    a real Dow circuit would not be frowned thereupon.

2. Use a maximum plate input power of 1 watt. Remember if the boys
    in Australia in 1926 or so could make 1500 miles on 4 milliwatts,
    we should at least be able to transcon on 1 watt, right?

3. Use any receiver. But, preference is to be given to an older style

regenerator, or at least to a real selfheating glassfet model rx.

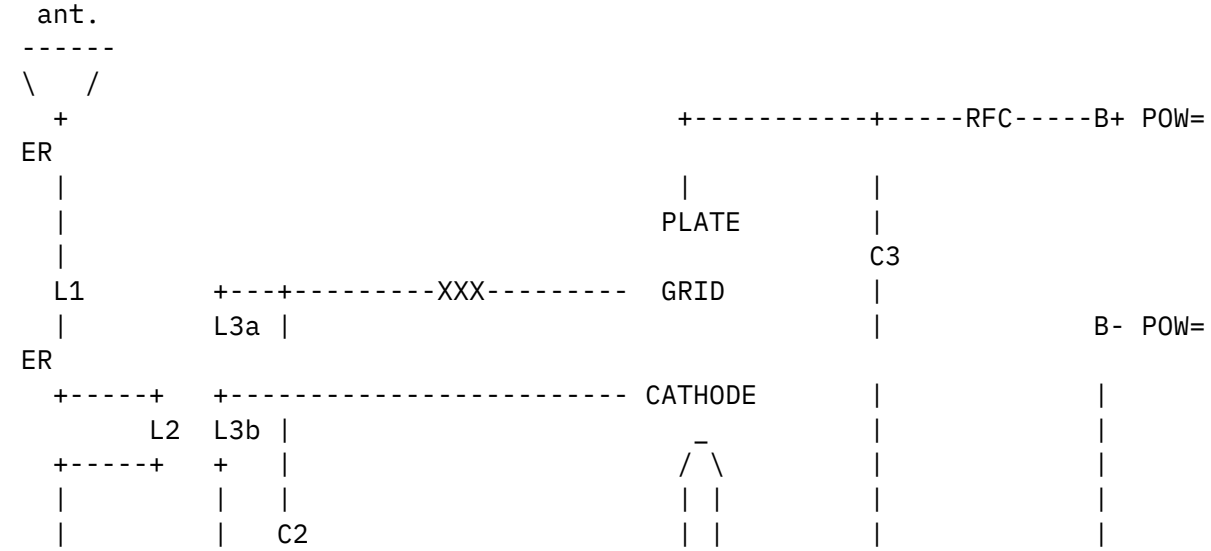
4. Contact as many Boatanchorites as possible during the run.
A generic call of ``CQ BAH DE yourcall K'' should be appropriate.

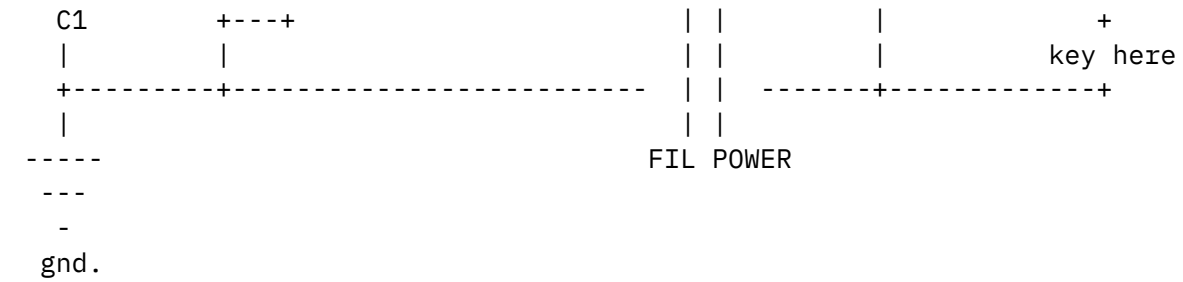
The date is not yet firmed up, but I will throw out the rules and call
for discussion thereupon, and details will be battened down as they fall
into place.

A tentative date might be early in November on a Friday night or a Saturd=
ay
night or a Sunday night. A QRG of the middle of the novice band at say
3702 or so, and the low end of the band at say the usual Boatanchorite
romping ground of 3527 +- QRM.

Here is my lowly attempt at a basic Boatanchorite world's simplest practi=
cal
Hartley oscillator transmitter. The original appeared in Radio News,
April, 1921, and the ``modern'' version first appeared in my book,
``The junior operator's guide to simple 1-tube Hartley oscillators.
A practical compendium of all that junk you might want to know'',
Proc. Raleigh Ama. Rad. Soc. Homebrew SIG, 26 June, 1991, 75pp.
This one is further refined to use an indirectly heated cathode tube,
and to keep rf out of the plate supply.....(:+}}.....

**********=
*****
World's Simplest Practical Hartley Oscillator Transmtter --- de NA4G
**********=
*****





Parts List:

1. Tube - 6/12SN7 or 6AS7 are recommended. Any triode will work. A 6J5 or 1626 is also a good tube to try. A 12AT7 or such would also work, but I have not specifically tried those smallish ones.

   A 955 acorn tube would be a neat thing to try.

   Those of you with ambitions tube collections can try an '01A or a UV-202. Maybe a nipple-headed 203 would be neat to try.

   (Steve Linscott - why don't you use an 833 to complement your 833 regenerative receiver! There is always a benefit to using one tube type throughout! The Germans were famous for that in their WWII radio sets.)

   Whatever tube you use, keep the plate input to 1 watt or less. That is a real Boatanchorite challenge.....(:+}}.....

2. Filament power - use a 6/12 volt battery if possible.

3. Plate power - use 100 vdc or less preferrably from small lead acid batteries of the 7 or 10 ah size.

4. L1 Antenna coil - 50 turns 1 to 1.5 inch diameter almost any solid copper wire. I use bell wire.

5. C1 Antenna tuning capacitor - 250pf receiving variable (100-400pf should work depending upon coil inductance. Resonate at 80 meters.

6. L2 Link coupling coil - use 2 or 3 turns around the ground end of the oscillator tank coil spaced about 1 inch from the oscillator tank coi=
l.

7. L3 Oscillator tank coil - use about 10 to 12 turns for the grid end of the coil (L3a) and about 8 to 10 turns for the plate end of the coil (L3b). It is not very critical, although it will affect the bias and feedback to some extent. Any tap from midtap to about 5

turns dowm from midtap towards ground should work reasonably well. You may have to adjust the tap. A total coil of about 20 turns is about right for the 80 meter band.

8. C2 Oscillator tank capacitor - use about 500-750pf total capacitance. A tuning capacitor of about 100pf and the rest in fixed padder works just fine and give a reasonable tuning rate. Set the inductance and capacitance to tune no lower than 3500khz with no antenna connected and it should spread out over about 3500-3600khz with a 100pf tuning capacitor.

9. C3 Plate Bypass Capacitor - use about 0.01uf or thereabouts. Anythin=
g
from 0.005 to 0.05uf should work fine.

10. RFC Plate choke - use anything in the range of about 1-2.5 or so millihenries. In the old days that was 250 turns on a 1 inch dowel rod form about 3 inches long scramblewound. A little 2.5mh receiving rf choke works fine.

Notes:

1. Keying in the B- lead usually works best. Use a keying relay with short flexible leads to prevent vibration transfer to the rig. Almost any sort of small 6/12 volt relay will work at hand keying speeds.

2. Make the tank coil form long enough to allow sliding the coupling link to obtain best coupling. There will be a point beyond which coupling you will get two resonant points. Uncouple to about half the output less what is obtained at that maximum critical coupling point for most stable operation.

3. No grid bias or other bias is used in the rig. None is required. But, if your theoretical conscience begins to bother you, you can install a 100pf + 10K ohm grid leak parallel bias network in the grid lead at the point marked XXX. You may have to play with the biasing resistor. A range of 5000 to 20000 ohms is usual.

4. Keep leads short and well dressed and mount the parts firmly. That will keep the rig with a fine and true ``1929 style'' note and keep Ross Hull and T.O.M. happy on their final watch.

**********=
*****

Hopefully my typing is up to snuff today and there are no particular errors or misteaks in the work.....(:+}}....

As the rabbit, the duck, and the pig are wont to say.....

``That's all folks!''

73/ZUT/BAF DE NA4G/Bob
rdkeys@unity.ncsu.edu

```
**************************************************************************=
*
*  73 TU SU VA DE NA4G             ``Boat Anchor Bob'', an ol' CW fart.  =
*
**************************************************************************=
*
*  Morse has been in the family for over 100 years.                      =
*
*  Morse radiotelegraphy (Spark/CW) has been in the family since 1914.   =
*
**************************************************************************=
*
*  May you have fair winds and following seas on your watch at the key.  =
*
**************************************************************************=
*=20
```

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: "Gregory Raven Redi" <ravengre@comm.mot.com>
Subject: Florida Radio Swap Meet
Message-ID: <9510131323.ZM4469@eehp04>

Attention FL Boatanchorites-

The Florida Antique Wireless Group (FAWG) will hold its fall swap meet and annual auction on Saturday, October 14. The meet will take place at the VFW hall on Edgewater drive in Orlando. The VFW hall is located just north of the intersection of Edgewater and Fairbanks. This is on the west side of Orlando. The meet is open to the public beginning at 9 AM.

Dealer set-up begins at 8 AM, and is staggered depending on how many tables are required. Dealers requiring 3 tables get in at 8, 2 tables 8:15, etc. Tables are $5 each. No selling allowed before 9 AM. This will be strictly enforced.

The auction begins somewhere between 11 and 12. Sorry, I don't know the auction rules, but this is not a very formal auction.

The FAWG meet ranges anywhere from fair to very good. There is of course the usual AM broadcast stuff, but sometimes boatanchor stuff shows up in abundance.
I'll be bringing an R390A, a CE100V, 2 BC348s, and some other neat stuff.

See you there.

73 KF5N

--

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: HAMRLUND@aol.com
Subject: for sale or trade
Message-ID: <951013155423_73778811@mail04.mail.aol.com>

MOST PRICES' ARE SHIPPED
(UNLESS NOTED OTHERWISE)
for sale or trade:

vacuum cap's: fixed
1 jennings VC-50, 20,000 V, CAPACITY 55 + 2-5 MMFDS, WITH
   CERAMIC STANDOFFS & CLIPS.....$55
1 ARC # 8046, 100MMF, CERAMIC STANDOFFS & CLIPS $45
2 WESTINGHOUSE, 50 UUF, 5 KV, 5 AMP $25 EACH

GLASMIKE'S: $15.00 FOR ALL
2 - .1 MFD 3,000 VDC,
1 - .05 MFD 4,000 VDC
1 - .1 MFD 2,000 VDC
1 - .25 MFD 3,000 VDC

XMITTING MICA'S...THESE MEASURE 2.75" IN DIA.
CORNELL-DUBLER .01 PK.W.V. 5,000
    18 A. @ 3MC, 20 A. @1 MC, 15 A. @.3 MC, 9.1 A. @ .1 MC $13.00
SANGAMO .01 PK.W.V. 5,000, 20 A. @ 1,000 KCS. $13.00
THIS ONE MEASURES 3.5" IN DIA.
SANGAMO .00015 PK.W.V. 10,000 3.6 A. @ 1,000 KCS $15.00

1 BAG OF 20 NEW CAP'S @ 1200 MFD, 75 VDC $23.00

YEASU UD-844 DESK MIC IMP. 50 K OHM DYNAMIC   45.00

RELAYS   (PLUS SHIPPING)

NEW IN BOX MIL. SPEC. # MK 1007, 12 VDC , 120 OHMS, DPDT $3.50 EA.

EIMAC 25 T, IN BOX, USED BUT GOOD $18.00

DELCO TRANSISTOR'S 18 NIB's DTG-110 $ 25.00 ALL

2 EF JOHNSON # 211 TUBE SOCKETS $20.00 PR

KENWOOD 820 PARTS PACKAGE ALL NEW IN PACKAGES $15.00
CONSISTS OF:
4 SK3050
12 SK3088
1 SK3122
2 SK3244
1 SK3245

KENWOOD TS520 DC CORD NIB $15.00

ARC MC DIAL AS NEW, 3-4 MC $8.00

MERCURY SWITCH, EBERT ELECTRONICS CORP. $18.00
MODEL EM-4
COIL 120 VAC
TUBE LOAD RATINGS
120 VAC/35 A
240 VAC/25 A
120 VDC/12 A
220 VDC/ 7 A
MOTOR
AC- 2HP
DC- 1/2 HP

BC-454-B TUNING SECTION W/ TUBES 3-6 MC $20.00

TEKTRONIX PARTS $15.00 ALL
the items listed below are new in they're packages.
inside were:
1 # 290-0510-00 can cap, 6000 uf - 15wvdc
This cap is listed as "common" meaning it isused in many different Tek instruments.

3 # 151-0150-00
These are 2N3440 transistors. Used in 5000, 600 series and many others.

1 # 155-0042-03 ic
This is a "Tek made" IC used in 5000 and 7000 series time bases.

3 motorola # mp2061-2

No Tek part number given so I can't find out anything . . .

1 # 151-0342-00
MPS4249 Transistor used in 7000, 5000, 2400, 4000, 200 series

1 # 151-1049-00
Dual FET. Used in 400 series and 5000 series plug-ins.

1 # 151-0005-00
This is a pretty old number, not consistent with the others, however,
assuming it is correct, it is a transistor used in the 81, 82, 84, and TU3.

ELECTRONIC LABORATORY
MODEL LW-40 2 M CONVERTER, I.F. 7-11 MC, USES FT243 STYLE XTALS

$13.00

KISTLER INSTURMENT
CHARGE AMPLIFIER, MODEL 566, CLEAN, NO A.C. CORD $20.00

WESTINGHOUSE TYPE TA INDUSTRIAL AC LINE ANALYZER
HANDLE ROUGH, ALL DOC'S, $75.00

PANEL METERS - TO MANY TO LIST - $6.00 EACH

ALL CERAMIC ITEMS ARE PLUS SHIPPING

CERAMIC INSULATOR'S - NO MANY TO LIST - 50 CENTS & UP + ship.
(various sizes & shapes)

CERAMIC OCTAL SOCKETS $ 1.50 EACH

CERAMIC COIL FORMS - PRICE DEPENDS ON SIZE - $0.75 & UP
(SOME MAY NEED WIRE REMOVED) various sizes + shipping

CERAMIC 7 PIN SOCEKTS - 50 CENTS EACH

AIR VARIABLES - USED - CARDWELL & OTHERS PRICE WILL VARI
(THIS IS IN ADDITION TO THE OTHERS I ALREADY HAVE)

F.L. MOSELEY, MODEL 135, X - Y RECORDER, RACK MOUNT UNIT
UNTESTED, APPEARS COMPLETE $35.00 + $9.00 shipping

CABLE CONECTORS - ALL TYPES - 75 CENTS & UP PLUS SHIPPING

RF CHOKE FORMS   12 FOR $1.00   + 65 CENTS SHIPPING

TORROIDAL COIL FORMS, 3 SIZES, 75 CENTS, 1.00, 1.50 EACH + SHIP.

TRIMM DEPENDABLE HEADSET $7.00

ALL TYPES OF SWITCHES - WAFFER TO CEAMIC - 1.00 & UP + SHIP.

ARCO DOUBLE CERAMIC TRIMMERS # 304M (NEW) 75 CENTS EACH +SHIP.

RELAYS - MANY TYPES, USED, $6.00 EACH + SHIPPING

CAPCITORS - MANY VARIATIONS TO CHOOSE FROM 1.00 & UP
(SOME ARE USED, SOME ARE NOT, UP TO 500 WV, CAN TYPE)

LOCTAL CHASIS MOUNT SOCKETS $75 CENTS EACH + SHIP.

7 PIN WAFFER TYPE SOCKETS 50 CENTS EACH + SHIP.

Robert

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: "Terry O'Laughlin" <OLAUGHLIN@vilas.uwex.edu>
Subject: For Sale: New Super-Pro power xformer
Message-ID: <MAILQUEUE-101.951012151212.256@vilas.uwex.edu>

I have an NIB power transformer for the older Super-Pros, probably SP-200/210. $15 plus shipping.

73 Terry O' WB9GVB

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: "Terry O'Laughlin" <OLAUGHLIN@vilas.uwex.edu>
Subject: For Sale: pre-war QSTs
Message-ID: <MAILQUEUE-101.951013170148.384@vilas.uwex.edu>

I have the following QSTs for sale. They are all in fair/good condition except as noted:

Sept 1930 no covers
Jan 1931

Mar 1931
May 1931
July 1931   2 copies available
Dec 1931
Sept 1933
Jan 1936
May 1936

I'd like $1.00 each plus shipping.

73   Terry O'   WB9GVB

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
Subject: FS Old Motorola HT Manual

Last call... posted a month or so ago, no interest, last chance before I
toss it in the trash:

I have a service manual for a Motorola HT series "handie-talkie", front
cover says 132-174 MC (MHz). I wish I had the HT to go with it!

Motorola part # 68P81032A30-E, copyright 1967. It's pretty amazing
technology for 28 years ago; big emphasis on how it's "all
transistorized."

Somebody must need the darn thing, and that's why I'm hesistant to throw
it away. First person to send me $5 for postage can have give it a good
home.

best way to reply is by e-mail.

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: KB9VU@aol.com
Subject: FS: Drake, etc.
Message-ID: <951011042028_121145062@mail04.mail.aol.com>

I have a Drake R-4C receiver and a T-4XC transmitter that I would like to
sell. The R-4C has crystals for 160 and full 10 meters but no aux filter=
s.
 S/N is 26030 and it is in VERY GOOD condition. The T-4XC is stock as it=
 was
first sold. S/N is 23037. NO POWER SUPPLY. $150 for the Receiver and $=
150
for the Transmitter. Original manuals included. Shipping is NOT include=

d
BUT I'll be glad to try and work out a delivery within 250 miles of St.
Louis.

Drake MS-4 Speaker. Good condition with scratches on the cabinet. $45

Hallicrafters SX-110 receiver. Very Good condition. Needs stencilling o=
n
the front detail strip. Manual copy included. $120 shipping included.

E-Mail or give me a call @ (314) 831-8174 evenings between 1800 and 2200
Central time. 0900 to 2200 on the weekends.

Thanks!

Mike, KB9VU

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: zoom@willow.sps.mot.com (Chris Terwilliger)
Subject: FS: NC-183D
Message-ID: <9510132053.AA03891@willow.sps.mot.com>

For sale, shipping not included:

National NC-183D receiver. circa 1952-58. 5 bands, .54 - 55 Mhz. Works and
is in good - very good condition. Scratches and scuffs on top and sides, but
face & dials clean. Knobs correct and good. Chassis is a little dirty, no
corrosion, no mods. Original manual included. $200

Chris Terwilliger, AA7WD
zoom@willow.sps.mot.com
aa7wd@n7mrp.az.usa.noam

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: "Integration Area" <integrat@usr.com>
Subject: FS: two old scopes
Message-ID: <9509118134.AA813429908@robogate.usr.com>

Some recent postings about old scopes has prompted me to get rid of
projects I will never get to, so...

For Sale:

Two scopes

  RCA Victor TMV-122B. This is a prewar (1938?) design, very crude. Last

time I checked it did work. Some of the tubes may be originals. The paint is about a C+, but it might get better after a good washing. The front panel has a slight crack in the steel on the side, but is really very minor and hides easily. The front has a decal from "Electro-Sound Milwaukee, Wis" (the shop it was used in?). Not very big, but a bit heavy.

  Tek 514AD. Vertical amp in trouble! The rest of the unit seems OK. Paint in about a C-, with a goofy symbol drawn on the side. Big and Cheap!

I will take offers until 16 Oct 1995. I am not looking to make tons of money, I am just tired of looking at the stuff. Money is good but trades are better. I am always looking for old Navy stuff, big or small, radio, radar, or whatever.

BTW, anyone out there have any big Navy transmitters or radars (in any condition) they are looking to get rid of?

William Donzelli
integrat@usr.com

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: "Terry O'Laughlin" <OLAUGHLIN@vilas.uwex.edu>
Subject: Globe Patcher
Message-ID: <MAILQUEUE-101.951012150813.640@vilas.uwex.edu>

I picked up a Globe Patcher phone patch at the Graylake hamfest. It appears to match the Globe Scout vintage. I picked it up as a curio. I'm ready to pass it on. Anyone want it for $7.50 plus shipping?

73   Terry O'   WB9GVB

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Nick England <nick@cs.unc.edu>
Subject: Re: Halli SX-88
Message-ID: <199510111429.KAA13336@altair.cs.unc.edu>

Some miscellaneous SX-88 thoughts -

a) They are rare and expensive these days. expect to pay $500 or more for one. Last one I saw advertized was for over $1000.

b) They are heavy - over 100 lbs I think, so careful shipping is needed

c) they are clearly something special - great geared tuning, heavy construction, styling, etc.=20

d) Make sure the metal bezel hasn't warped - this is some cast metal
that transmogrifies itself over the years - mine had forced it's way
out of the steel panel and jammed the dial indicator adjustment shafts.
It is like pot metal and there doesn't seem to be anything that can be do=
ne
to fix it. The person I got my SX-88 from did NOT tell me about this
problem - caveat emptor.=20

e) There is a toothed belt that runs from the bandswitch up to the
main tuning and bandspread dials - it turns slotted masks so that the
correct band is illuminated from the rear. This belt evidently rots and
replacements cannot be found - some odd number of teeth. My rcvr had the
slots cut out so that all bands were illuminated (this one the seller did
tell me about)

f) Mine is still waiting its turn on the bench, so I can't comment on
performance - it got glowing reports in the ham mags of the day, though.

regards & let me know if you know where to get a belt for this beast,
Any more SX-88 owners out there ?
Nick KD4CPL
nick@cs.unc.edu

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Liles Garcia <liles@bitinc.com>
Subject: Hallicrafters SX-88 Information
Message-ID: <199510102301.QAA13672@zephyr.bitinc.com>

Good afternoon Fellow Boatanchors,

I have been researching the Hallicrafters SX-11's, SX-24's, SX-25's,
and other fine receivers that have been recently discussed here on
the List. (I have been using my Moore's book for my information.)
As I was getting ready to come to work this morning, I was thinking
that nobody talks much about the SX-88. So I thought that I would
post a note asking about the SX-88. However, Rodger, WQ9E, beat me
to the punch. Rodger, great minds think alike. So if anyone has
any thoughts on the SX-88, please post them to the list. Hopefully,
Rodger and I are not the only two Boatanchorites that are interested
in this receiver. I have never seen one of these in person.
Thanks in advance.

Regards from Aloha, Oregon,
Liles Garcia

liles@bitinc.com

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Andy Wallace <wallace@mc.com>
Subject: Ham Trader Yellow Sheets address/number
Message-ID: <9510110207.AA00992@kali>

Ham Trader Yellow Sheets
P. O. Box 15142 (for subscriptions without ads)
Seattle WA 98115
Fax for Visa/MC subscription/ad placement: 708-690-6230

Subscriptions are $18 for 24 issues (one year)
or $4 for a 4-issue mini-subscription

Not affiliated, etc., etc., but several folks have asked me
for the address. This should probably go in the BA FAQ if
it's not there already!

--Andy
wallace@mc.com

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: HAMRLUND@aol.com
Subject: HAMMARLUND PARTS GUIDE & CROSS REF.
Message-ID: <951013123356_43691726@mail02.mail.aol.com>

AT THIS TIME, THE FOLLOWING WILL BE A COPY & SINGLE PAGES

THE HAMMARLUND PARTS GUIDE & CROSS REF.
A LISTING OF THE MOST USED PARTS # 's (WITH DISCRIPTIONS)
AND WHAT UNIT(S) THEY WILL WORK IN !! PLUS...
THE BIG 158 (DOULBLE SIDED PAGES) CROSS REFFERENCE
OF OLD TO NEW PARTS NUMBERS (NO DISCRIPTIONS)
AS ISSUED IN 1967 BY HAMMARLUND TO IT'S PERSONEL...
GET BOTH FOR.....$40.00 SHIPPED....

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: Hartley Rally
Message-ID: <FABM0142.FABM0156@mail.admin.wisc.edu>

to: boatanchors@theporch.com

Hello Bob, et. al.

Hey, a Hartley rally sounds like a good time! I've gotta couple of stray UX-210s floating around, as well as a slab of pine to stick 'em on, and a hunk of copper gas line for a tank coil.

BTW, for those who REALLY wanna get into this, I'm looking over an article here at work tonight that's right up the same alley.

If you can get hold of it, check out the June, 1972 issue of CQ Magazine (page 14); "A Modern 2-Tube Receiver To Meet 1931's Strict Operating Standards", by Bill Orr, W6SAI!

He's showing a neat little type 24 regenerative detector, followed by a type 27 audio stage.

This thing's a legit construction project, complete with winding instructions for plug-in coils for 160, 80, 40, and 20 metres. Ol' Bill has the tongue planted firmly in his cheek; "...The receiver even works well on the ultra high frequencies, such as the unexplored 10 meter amateur band.", but even so this little box has made it to my "must try" list.

BTW, he admits that much of the info was lifted from "A Two Tube A.C. Receiver" by George Grammer, from the December, 1930 issue of QST.

I can't think of a more fitting companion to a Hartley rig than this little inhaler.

73's,

Tom, K9TA

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: haynes@cats.ucsc.edu (Jim Haynes)
Subject: Henry Ford Museum
Message-ID: <199510130102.SAA04533@hobbes.UCSC.EDU>

I just discovered the web page for Henry Ford Museum
http://hmf.umd.umich.edu

There is a museum shop, and one of the things you can order from it is a
carbon filament light bulb, a replica of the kind Edison made,
for $12 (plus $6.50 S&H)

order phone is 1-313-271-1620 ext 378, or fax 1-313-271-8059

(I have no connection, etc., it just seems like a neat thing.)

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: doonan@cordmc.dnet.etn.com (DENNIS DOONAN X6916 (KG9DO))
Subject: RE: Henry Ford Museum
Message-ID: <9510131806.AA02793@etn.com>

Web page address is:
  http://hfm.umd.umich.edu
          ^^

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: haynes@cats.ucsc.edu (Jim Haynes)
Subject: Re: Henry Ford Museum
Message-ID: <199510131857.LAA11082@hobbes.UCSC.EDU>

Cursed typos! It's gotta be hfm, as in Henry Ford Museum, not hmf
or some other permutation

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: Steve Ellington <n4lq@iglou.com>
Subject: Re: Henry Ford Museum
Message-ID: <Pine.SOL.3.91.951013150022.21090B-100000@iglou2>

Speaking of museums. The Henry Ford Museum in Dearborne, Mi has a
fantastic display of old telegraph and radio gear. Check out some of the
multiplexed telegraph inventions, early spark stuff and nice ham gear.
They even have SX-28's etc. Don't forget to see Edison's last breath that
Ford saved in a test tube!

Steve Ellington N4LQ@IGLOU.COM Louisville, Ky

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: lardiere@ix.netcom.com (Rocco Lardiere)
Subject: HP 606A HELP!

Message-ID: <199510111713.KAA06576@ix5.ix.netcom.com>

Help! My HP606A RF generator died yesterday. I found the "B+" 0.15-A
fuse blown and replaced it. The replacement does not blow, but no RF
output, although the modulation meter seems to respond to its control.
I suspect a bad tube or filter cap.

Does anyone know of a source for a copy of the manual for this? I
would be happy to pay for copying at least the schematic, if not the
whole manual. If anyone has experience with fixing these things and
has some hints, I'd like to hear them.

Thanks - two nice receivers are waiting for this thing to be fixed!

73,

Rocco Lardiere N6KN

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: "Cal J. Eustaquio" <ceustaqu@violin.aix.calpoly.edu>
Subject: HQ-120 owners
Message-ID: <Pine.A32.3.91.951012130357.1746A-100000@violin.aix.calpoly.edu>

How many HQ-120 owners are there out there and how do you like your
receiver? What applications are you using the rig with now? 73's. Cal. N6KYR.

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: KS0F@aol.com
Subject: huh?
Message-ID: <951011145807_41949349@mail04.mail.aol.com>

Is the reflector up? Is AOL down to the outside world? Or is it
just me?   KS0F

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: Philip Gwyinne McCoy <dgnova@eng.umd.edu>
Subject: HZ51
Message-ID: <199510111955.PAA12484@mocha.eng.umd.edu>

Subject HY51Z
The HY51Z is a zero bias version of the HY51A
filament 7.5 volts at 3.5 amperes
class C output @ 75 % efficiency 131 watts

The HY51A:
filament 7.5 volts at 3.5 amperes
plate 1000 volts max at 175 max ma.
plate dissipation   65 max watts
class c output at 75% efficiency 131 watts

>From: HAMRLUND@aol.com
>Subject: tube question
>anybody in the group, have any info on a Hytron HY51Z tube?
>what is it?
>used for?

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: Ronald H Steinberg <rhstein@interaccess.com>
Subject: info on a Triplett 1696a
Message-ID: <199510120234.VAA18356@thymaster.interaccess.com>

Looking for any information on a Triplett 1696a AM modulation monitor

RON K9IKZ

Ron Steinberg K9IKZ rhstein@interaccess.com
               708 773 3583 hm 708 773 0822 hm fax

     At work: rentcom@mcs.com http://www.rentcom.com
               708 678 7000 wk 708 678 9378 wk fax

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: berg stephen erik <z931086@oats.farm.niu.edu>
Subject: Keying question
Message-ID: <Pine.SOL.3.91.951011121928.15703A-100000@oats>

I am working on getting my old Central Electronics 10A back into service. It covers AM, PM, and SSB. No CW. Does anyone have any suggestions for adding a keying circuit? It uses a 6ba7 mixer driving a 6ag7 output stage.

Tnx and 73,

Steve WA9JML

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995

From: jproc@worldlinx.com
Subject: KTW6x Tubes
Message-ID: <Chameleon.4.01.2.951010231446.jproc@jproc>

Dear BA's,

Does anyone have a substitution listing for a British KTW61 and KTW62 tubes?

Regards,

Jerry Proc VE3FAB
E-mail: jproc@worldlinx.com
Radio Restoration Volunteer
HMCS Haida, Toronto Ontario

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: bill.sorsby@dlep1.itg.ti.com (Bill Sorsby)
Subject: KW2000B coil cores
Message-ID: <199510131947.OAA09476@dlep1.itg.ti.com>

Anybody know where I can get oddball sized powdered iron coil cores. I dug into the KW2000B the other night and discovered (as predicted by a fellow BoatAnchorite) that six or eight of the coil and transformer cores were shattered. (Some people have no respect for circuitry.)

Anyway, these cores are slightly different from anything I've got in my junk box or that I can find at the local electronic surplus store. These cores are slightly less than the common 1/4" O.D. and they have a much deeper thread. Since the KW2000B is British made I suspect that the Brits may have used a metric size of perhaps 6 mm. (Yeah, I know the Brits weren't metric then, but they were and are in close proximity to countries which are.)

Any help regarding some place in U.S. which might have such things or maybe even some place outside the U.S. would be much appreciated. Otherwise, well, I don't really want to replace a bunch of inductors if only the core is needed.

Regards,
Bill, N5BU

P.S. After tuning only those remaining cores which could be adjusted, the KW2000B receiver really came to life, so I'm not sure there's much wrong

with this old British transceiver, other than needing some new coil cores
and TLC.

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: mallick@orion.crd.ge.com (John Mallick)
Subject: Re: KW2000B coil cores
Message-ID: <9510132110.AA23515@orion.crd.ge.com>

Try Micrometals in CA (1-800-356-5977). They make powdered iron cores
and slugs and may be able to help. I don't know if they supply metric
threaded cores, but they might be able to tell you how to machine
blank cores to the proper size.

73, John WA1HNL

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: "Marcotte, T F (T" <TFMA@chevron.com>
Subject: Last Ships to Get R-390A's
Message-ID: <CPLAN030.TFMA.160441060095284FCPLAN030@ION.CHEVRON.COM>

From: Marcotte, T F (Tom)
Subject: Last Ships to Get R-390A's
From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Logarithmic Decrement, Decremeters, and Sparks, etc.
Message-ID: <9510132048.AA100582@csemail.cropsci.ncsu.edu>

> Greetings again - hey, the sun's out!

I hope the printout came out OK Duncan.....(:+}},,,,,

> A quick question - I've come across the term 'logarithmic decrement' - what is
> it, and why should one wish to measure it ?
>
> 73,
> Duncan ON9CHU / G0UTY G-QRP 8117

In spark days, the quality of the tuning and coupling of the transmitters
was measured by logarithmic decrement of the wave.

Basically, a device called a decrementer (nothing more than a calibrated
output simple tuned tank wavemeter with a small sensitive ammeter on
the output) was used to tune across the spark signal and measure the

field strength. This was plotted on a curve to get a measurement of how broad the wave was. If it was directly calibrated, as, for example R.A. Kolster's Decremeter, it read the decrement on the dial. If it was just a wavemeter, then calculations and charts had to be made.

The decrement is basically the change in signal strength over the change in wavelength. A decrement of 0.2 was considered normal for spark sets and anything of 0.1-0.2 was generally OK legally. A decrement of 0.2 gave a spark train of 24 waves before it had damped off to zero, in each ``wave train''. Each spark was one wave train composed of a number of radio waves in a train. There were anywhere from 50 to 500 or so sparks per second, depending upon the type of spark rig.

The decrement of a wave is the Naperian logarithm of the ratio of one oscillation to the preceeding one.

It is given by the formula:

$$M = \frac{4.605 + \text{gamma}}{\text{gamma}}$$

where M is the number of complete oscillations in the spark discharge and gamma is the logarithmic decrement constant.

Gamma is defined as the log(e) of the ratio of the amplitude of the first first wave peak over the amplitude of second wave peak. Since it is a constant defined by law to be of 0.2, then you can compute the value of 24 waves for that gamma constant.

>From a practical point of view, a larger gamma value closer to 0.2 was more desirable than a gamma value of 0.1 or less. This is because at low gamma values, the wave was abruptly cut off, and did not ``ring'' in the oscillation of the oscillatory tank. What happens when a circuit tank does not ring with sufficient flywheel effect? It is not sharply tuned and it emits all kinds of harmonic energy. In practice a value of 0.2 gave a good practical sharpness of tuning for a spark rig whilst not excessivly emanating great and copious quantities of harmonics.

In this manner, spark transmitters could be tuned to waves 150 meters apart and not interfere with each other. Hence, standard waves of 300, 450, and 600 meters were the practical waves used on most commercial spark sets, unless longwave sparkers. Closer than that they would interfere with each other.

A real decremeter is calibrated to give the decrement values of a particular rig/tuning/antenna setup. But, remember that it is just a calibrated output wavemeter and nothing more.

When tube transmitters came along and spark was phased out, it became an dinosaur of the bygone era. I remember my OM telling me stories about using R.A. Kolster's decremeter aboard ship back in 1924. I never really understood what it was until I happened upon a copy of Elmer Bucher's ``Practical Wireless Telegraphy'', 1917 edition, wherein it is clearly explained, theoretically and practically, with diagrams, charts and pictures, etc.

Why do you ask, I am wondering? Did you, perchance, happen upon an elusive Kolster Decremeter?

73/ZUT/BAF DE NA4G/Bob

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: "Lee K. Gleason" <uhnix1!mwk!gleason@academ.com>
Subject: Looking for Nixie tube sockets
Message-ID: <00997B517A08E0E0.2661CF00@mwk.com>

  I just got a bunch of NIxie style indicator tubes from a surplus place, and want to use them in some projects.

 Haven't found a source for sockets, so I thought I;d ask here... the tubes unfortunately have no marking on them to indicate their type or manufacturer, but, they require a socket that looks like...

  Approximately...the size in the picture is pretty much correct but it it is more of an oval than a football shape - the top & bottom pins don't project that high and low.

  Anyway, if anyone recognizes that style of socket, and has a source for them (or can even just name that style of socket, so I can go around asking for them), I'd appreciate hearing about it.

  Also, these Nixie tubes have an unusual element inside the envelope.. Along with the usual number shaped elements, the two center electrodes go

into a white cylinder, the size of a small resistor, that has no apparent
funtion (tubes work fine with nothing connected to it)...any idea what
this could be?

Lee K. Gleason N5ZMR
Control-G Consultants
gleason@mwk.com

From boatanchors@theporch.com Fri Oct 13 14:09:00 1995
From: List Admin/Owner BoatAnchor Mail List <listown@jackatak.theporch.com>
Subject: Major Outage with the Provider - now fixed
Message-ID: <9510130644.aa05892@jackatak.theporch.com>

Hello Gang-

We expect the provider to come back up on line this morning.

They shut down Tuesday at midnight, expecting to be back online by
Wednesday early AM... They experienced several problems that were not
planned for nor expected during the upgrade, and as a consequence,
they did not come back up until late Thursday evening.

The connection for theporch.com did not get reset properly before they
left, and so it will not be reestablished until this morning, Friday.

When you get this message, you may rest assured the list is up.
HOWEVER, PLEASE GO EASY... we have a huge amount of mail in the queue
and additional posts, asking if the list is up will only make things
much worse...

PLEASE relax, remember that however enjoyable, this is only a hobby,
and we are working quite hard to keep things moving and don't need any
additional aggravation right now.
--
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657/#1789 -- both all mobile! ;^)
               - - - BoatAnchor Mailing List Owner - - -
 listown@jackatak.theporch.com-"Plus ca change, plus c'est la meme chose"

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: "Clark, Ian R." <IClark@vnpbtrom.telecom.com.au>
Subject: Marconi TF801A/1 RF Sig Gen Cct.
Message-ID: <307C5795@msmailv0.telecom.com.au>

Hello All,
     I happen to own a Marconi TF801A/1 RF sig Gen (10-310Mhz) along with a variety of glow in the dark test gear. Does anyone out there have a circuit for this beast
or know where I can get one, preferably locally in Australia.
                         Ian Clark VK3KRI

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: bcutter@teal.csn.net (Bob Cutter)
Subject: Morse Sounders
Message-ID: <199510111404.IAA26248@uucp-1.csn.net>

A while back there was some discussion of driving Morse sounders with off-the-air CW. I use an old HAL ST-5 to drive mine.

Here is a source for project boards and completed units to drive a sounde=
r
off the air or from tape recording:

S. K. Vaughan
Box 291
Mt Vernon, IA 52314

319/895-6330

73, Bob KI0G
END

Bob Cutter, ...Glenwood Springs, CO

KI0G

bcutter@teal.csn.net

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Kevin J Pease <kevin@mm1001.theporch.com>
Subject: My address
Message-ID: <Pine.LNX.3.91.951010175644.28354A-100000@mm1001.theporch.com>

  This message is in MIME format. The first part should be readable text,
  while the remaining parts are likely unreadable without MIME-aware tools.
  Send mail to mime@docserver.cac.washington.edu for more info.

--NAB25841.813349200/uro.theporch.com
Content-Type: TEXT/PLAIN; CHARSET=US-ASCII
Content-ID: <Pine.LNX.3.91.951010175644.28354C@mm1001.theporch.com>

Sorry bout mail bounced again. To the gentleman with the filters forsale

My address is:

Kevin Pease
710 Overlook Dr.
Mt. Juliet,TN 37122

Kevin J Pease
WB0JZG Mt Juliet, TN.
mm1001.theporch.com

--NAB25841.813349200/uro.theporch.com--

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: NC 101X Help Needed
Message-ID: <9510101615.AA00717@bock.ih.att.com>

All I know is that the NC101X should have a 500 ohm choke or speaker fiel=
d,
and the pushpull output xformer should match 6F6s, nee 42s, which most
any old xformer should do. I'm using an old Zenith speaker witha 600 ohm
field and a 6F6 xformer. Not tons of volume, but good tone.

One thing I was going to post about -- BIG ERROR in the factory docs
re the cathode bypass cap for the 2nd detector. Since this is a "plate-b=
end"
or "linear power" detector, as used on most early-30s home radios,
the cathode resistor and capacitor are critical.

The parts list shows .01 uF. The dyslexic typist meant 10 uF. It's that
little electrolytic in the corner. Withotu tracing the wiring, I had pre=
viously
put my digital cap meter across the detector cathode and read .03 or so,
and thought that was good, and kept looking for the cause of my 101X's we=
ak audio.

After looking at the Rider's docs that someone sent me, I found that the =
'lytic was
supposed to be 10 uF! So, after a teensy computer-grade lytic was wired =

in
parallel (plus a non-lytic .3 at the tube socket -- you ahve to bypass bo=
th
RF and audio freqs), the 101X sound a LOT better.

BTW, it's normal for the RF/IF screens to read only 65-70V. At least tha=
t's
what Sams says for the immediate postware NC-183 or whatever. I swapped =
the
originally-equal 20K voltage dividers to get mine up to 75 or 80V, but it
didn't really make much difference.

These early Nationals are unique in using the mixer sfcreen grid to injec=
t
the local oscillator, sort of an early pentagrid mixer. The result is
the ability to hear static noises even on 10 meters, not bad for those ol=
d
octal double-ended tubes.

Your powder-coated speaker must be for a more recent National -- another =
Nat collector
would probably swap you even for the correct version (?). 73, mike k w9n=
rd

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: HAMRLUND@aol.com
Subject: NEED 800 # FOR NTIS
Message-ID: <951010225345_41399640@emout06.mail.aol.com>

Need the # where larry works.
anybody have it?

thanks robert

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: SP600@aol.com
Subject: no mail
Message-ID: <951012183256_122520417@emout04.mail.aol.com>

Hello, I haven't received any mail in 2 days from boat anchors. Have I been
deleted for some reason that I'm not aware of?

Thanks,

Charlie N9SOR

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: Jeffrey Herman <jeffrey@math.hawaii.edu>
Subject: Re: no mail
Message-ID: <Pine.SUN.3.91.951013083902.23399D-100000@kahuna>

On Fri, 13 Oct 1995 SP600@aol.com wrote:
> Hello, I haven't received any mail in 2 days from boat anchors. Have I been
> deleted for some reason that I'm not aware of?

It's a *very* good thing that all 600+ of us didn't send such a "ping"
to the list! What a mess that would have resulted. As a reminder
for the public good, you can check if the list is up via two methods:

1. ftp sunsite.unc.edu
   login: anonymous
   password: <your address>   then
   cd pub/academic/agriculture/agronomy   (well hidden!)
   get DAILY.BA
   quit

2. Send an email to the list owner (I'm sure Jack wouldn't mind
receiving 600+ "Is the list still up, Jack?" messages... =:o)

Now back to our regularly scheduled Fire Bottle Forum.

Jeff NH6IL

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: tech@cs.athabascau.ca (Richard Loken)
Subject: One more time! WJ Ford address
Message-ID: <m0t342Y-0018L0C@aupair.cs.athabascau.ca>

Since five people asked, here it is:

    W.J. Ford Surplus Enterprises
    21 Market St N
    Smith's Falls, Ontario

    P.O. Box 606
    Smith's Falls, Ontario
    K7A 4T6

    telephone: (613)283-5195

fax: (613)283-0637

The web address has been listed a few too many times already.

Richard Loken VE6BSV, Systems Programmer - VMS
Athabasca University
Athabasca, Alberta Canada
** tech@cs.athabascau.ca **

: "...underneath those
: tuques we wear, our heads
: are naked!"
: - Arthur Black

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: shaun.merrigan@freddy.com (SHAUN MERRIGAN)
Subject: OOPS, that would be 51J4
Message-ID: <8B2C433.0004024DAF.uuout@freddy.com>

On 10/09/95, N5OFF spoke about OOPS, that would be 51J4; I say:

N>Substitute "51J4" for "51J5" in my previous poost, err, post.
N>tom

DARN! And here I thought we were onto a "new" undiscovered Collins BA.

Shaun =20

Shaun P. Merrigan
merrigan@nyquist.ee.ualberta.ca
shaun.merrigan@freddy.com
3rd Year EE University of Alberta

=FE CMPQwk 1.42 856 =FEThesaurus: ancient reptile with an excellent vocab=
ulary.

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Cosmo224@aol.com
Subject: parametric handbook
Message-ID: <951010193447_72786561@emout05.mail.aol.com>

Howdy All

I am looking for an out of print book titled "The Parametric Amplifier

Handbook"
Does anyone have a copy for sale or know where I can get one?

73 de AA9IL
Mike Kana

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: zilmer@dt.wdc.com (Matthew Zilmer)
Subject: Pass on from rec.radio.swap
Message-ID: <9510111648.AA03282@nexus.dt.wdc.com>

I found this post on rec.radio.swap. Surely, someone
on this list would be interested!

Matt Zilmer
Advanced Radio Workshop
WA6EGJ

From: Cedric Walker <Cedric.Walker@Tulane.edu>
Organization: Tulane University
From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: "Cal J. Eustaquio" <ceustaqu@violin.aix.calpoly.edu>
Subject: power supply tech help
Message-ID: <Pine.A32.3.91.951012130703.1746B-100000@violin.aix.calpoly.edu>

Folks:
Another question has come up. I am gathering parts for a power supply to power my TCS xmtr. I also want to have this p.s. do double duty for my Harvey Wells Bandmaster TBS-50D. Both schematics call for two 5U4's in parallel. I only need less than 200 ma for this. Why does the TCS and HW schematics use two 5U4's since the rating for the tube (according to my 1962 ARRL handbook) states max current from one tube could be 300ma? Additonally, I want to provide regulated voltages for both VFO's. Each one needs a different source (about 200VDC for the TCS and 300VDC for the TBS). I am considering building up a single supply for 350VDC, put in an appropriate dropping resistor for each transmitter, switching between both resistors and changing out VR tubes (i.e. two VR-105's for the TBS and two VR-150's for the TCS). How does that sound? I am interested in any suggestions to my cause. 73's. Cal, N6KYR.

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: n5off@w5ddl.aara.org

Subject: R-390A Users Survey
Message-ID: <199095@w5ddl.aara.org>

Reply to: n5off%w5ddl.aara.org@usl.edu

To get a copy of the subject list, send a message to:

listproc@theporch.com

leave the subject line blank

in the body of the message type

get boatanchors r390a.users

Thanks to all who have contributed R-390A info. We have data on over150 rigs from 16 contracts. The lowest serial number seen was 2, and the highest in a given contract was over 6000. Contributions include those from Dittmore-Freimuth and Fowler Industries contracts, as well as an EAC Industries consumer products run.

As I mentioned in earlier posts, I am compiling a survey of R-390A's owned by people who frequent the packet and Internet boards. The object of the game is to try and ascertain how many contracts were let for manufacture, and how many were made.

If you wish to participate in the census and you own one or more R-390A's (or spy them on ships, hamfests, or just anywhere), please go take a peek at it (them) and then reply to me with this information:

1) maker (EAC, Motorola, etc)
2) order number (63-PH-54 for ex) from the front tag
3) serial number off of the front tag
4) any unusual features (tags, stamps, frequency shield, etc)

The list includes an accounting of the contributors, however, the names are not matched with the rigs. If contributors have a desire to sell their rigs, I'm sure they will speak up, so you shouldn't expect any cards or letters from making a data contribution to the list.

Thanks,

de tom n5off%w5ddl.aara.org@usl.edu   Internet
            n5off@k5arh.la.usa   packet

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995

From: steve@hi.com (Steve Byan)
Subject: Re: R390A Main power switch
Message-ID: <v02130507aca308d629f5@[140.243.30.128]>

>My R390A is "on" all the time - the microswitch mounted on the front panel
>function switch seems to be permanently closed. I seem to remember someone
>on BA saying that these switches freeze regularly, but can be fixed. Anyone
>have any idea how, or where I can get a replacement?

Hollow State News issue #32 contains an article entitled "R-390A Won't Turn Off (Again)?" by Dallas Lankford. The article describes how to fix the microswitch in the function switch. HSN #32 can be purchased for a check or money order payable to "Ralph Sanserino" for US$1.00 (USA, Canada, and Mexico) US$2.00 elsewhere.

Hollow State News
c/o Ralph Sanserino
P. O. Box 1831
Perris, CA 92572-1831
USA

Regards,
-Steve

Steve Byan
Hitachi Computer Products (America), Inc.
1601 Trapelo Road
Waltham, MA 02154

internet: steve@hi.com

phone: (617) 890-0444
FAX: (617) 890-4998

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: "Nickels, Bob" <RNickels@P16.IL50.micro.honeywell.com>
Subject: Ranger problem
Message-ID: <307EB159@mail_gw.micro.honeywell.com>

I'd appreciate any suggestions on a problem with a Ranger 1 - low drive on 40 meters. I've checked out the bandswitch and even grid-dipped the driver coil to be sure it's resonant, but still only get 1 ma. or less max. drive on 40. No problem getting at least 2.5 on other bands. Have considered the VFO, but seems odd that it's ok on the higher bands and the 40 meter output is used there also. I can get the typical 35-40 watts output on all bands but 40, where I get 20 watts, max. Any ideas?

73, Bob KE0T
rnickels@p16.il50.micro.honeywell.com

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: Re. RTTY Remembered
Message-ID: <FAC03545.FAC03556@mail.admin.wisc.edu>

to: boatanchors@theporch.com

Ah, yes... Your REALLY had to be a hard core case to get into RTTY!

In the '60s, finding a machine was a challenge.

After months of searching around, I found that Reese, K9TOL, was a Teletype Corporation employee, and he had a garage full of 'em, free for the asking.

After bamboozling my Dad into driving me up to the North Side of Chicago to Reese's QTH, I became the proud owner of an RTTY machine... but not quite the kind of machine I'd hoped for.

I'd seen pictures in the ARRL Handbook of Model 15s and 19s, and to me, THIS was an RTTY machine.

What was available, it turned out, was a bunch of old Morkrum 2B printers. Hey, the price was right...

The Morkrum wasn't a page printer. This thing typed out it's messages on a gummed paper tape about a quarter inch wide. Western Union used to take the tapes, cut 'em into line lengths, and stick 'em on the telegram forms. The design was strictly '20s, and obsolete by 1940.

The first problem was that the paper tape hadn't been made in about 25 years and the machine was useless without it.

After much pondering I hit on a solution to the problem.

A quick trip to Olsen Electronics yielded up a roll of El Cheapo open reel audio tape. The reel hub would fit the machine's tape reservoir after a fashion and the dull side of the tape would take the print fairly well, tho you had to handle it carefully to prevent smearing the message before the ink dried. Also it was advisable to buy the tape with the lightest colored oxide you could find to make the messages readable.

OK, now that we had something to print on, a local loop supply was thrown together to make the machine actually DO something... and, wonder of wonders, it actually DID do something; it would print out what was typed into it's keyboard! That is, it WOULD, once the mechanisim was de-crudded, relubed, and

the "sweet spot" on the range selector adjustment was found (RYRYRYRYRYRY...).

K9TOL's generosity (i.e., his desire to see the floor of his garage again) had also sent my way a Model 14 Transmitter / Distributer (i.e., punched tape reader), and a Model 14 Reperforator (i.e., punched tape cutter).

Two more jacks were wired in series with the local loop supply, and these critters were plugged in, in series with the Morkrum. The Morkrum's keyboard now could be used to perforate tapes, which could be fed to the T/D. We were REALLY impressing the local hams now! A short tape was cut and it's ends glued together. When fed to the T/D the whole mess clattered into action at 66 words per minute, ceaselessly hammering out THE QUICK BROWN FOX JUMPED OVER THE LAZY GRAY DOG'S BACK 1 2 3 4 5 6 7 8 9 0 DE WA9QMB, CHICAGO ILLINOIS AR.

The guys from my high school thought it was cool, but Rube, K9ANM (the ham who lived down the street) just rolled his eyes, shook his head, and said "Oh Jeez... As if he didn't generate enough QRM on CW!".

Things were shaping up nicely. Now, I needed a terminal unit (i.e., RTTY demodulator). Once again, the ARRL Handbook came to the rescue, with a design for "The Twin Cities TU".

First step; at school, go to the sheet metal shop, and have a buddy bend up and spot weld a chassis. Galvanized steel. An awful LOT of ham gear came out of Chicago Vocational High School built on galvanized steel chassis; it was a hell of a lot cheaper than actually BUYING a chassis from Allied or Newark. So the stuff was a pain in the butt to work with, and you needed a torch to solder a good ground connection to it?

Next, fly a quick raid on Mr. Shapiro's electronics class to scrap the horizontal linearity coils out of a couple of old TV sets to use in the RTTY tone filters. While we're there, scoop up a few 12AU7s and a 5Y3.

I don't remember where I got the #255 polar relay, but I certainly DO remember that the trick wasn't finding a relay; it was finding a SOCKET for the relay!

Pretty soon, the beast was ready to try. There were many unencrypted commercial press signals on the air then, and my old SX-28 made a pretty fair RTTY receiver.

Very quickly I found out why polar relays fell out of favor with commercial users; adjusting those damned things was absolute HELL! The most satisfactory adjustment tool I could find was a finishing nail. This sport was made even MORE fun by the fact that the contacts you were adjusting were about 100 VDC hot with respect to the chassis, and they could only be adjusted while the whole mess was running!

Eventually, the Handbook came out with a version of the "Twin Cities" that used a 6V6 keyer tube in place of the polar relay; GREAT improvement! Happily, I threw away every finishing nail I could find in the shack.

Pretty soon, it was time to think about transmitting.

The old Heathkit Apache was pressed into service. Wayne Green's book "HAM RTTY" showed a diode frequency shift keyer for the DX-100; close enough.

We added it to the Apache, kinda improvised a shift setting (850 cycles, plus or minus probably 100 cycles; after all, we did it by ear!), and we were off and running!

I didn't have an 80 metre antenna; the lot was too short. However, 80 was the hangout of RTTY men, so we improvised with the 40 metre antenna and an antenna tuner. The result was disaster.

Had I been running SSB or CW, we'd have gotten away with it. RTTY, however, has a 100% duty cycle.

The tape was hammering out at 66 WPM; CQ CQ CQ DE WA9QMB CHICAGO ILLINOIS. I was watching my own signal coming in on the receiver, and loving every bit of it! The Apache was pumping her little heart out, cranking about 125 watts of RF out of the much abused and overheated 6146 finals.

That's when it happened.

In my haste to get on the air, I'd mistuned the antenna tuner. Too much circulating current in the tank coil, and it was getting hot.

When the tape ended, I grabbed the hand key and sent the mandatory CW station ID; DE WA9 ....

At that moment, the B&W coil stock in the tuner gave up the ghost.

SPOING!!!!

One end had unsoldered itself, and the whole coil collapsed on itself like a tired Slinky, splattering melted plastic from the now defunct support bars all over the place, including on the operator.

When the end let go, the Apache suddenly decided it didn't like the taste of the load it was now pumping RF into, so the PA plate current took off for the top of the meter.

A moment later the lights went out as the fuses blew (I later found that the fused line plug had 25 amp auto fuses in it).

My father bellowed from the living room as the TV set went black, preventing him from seeing where a line drive hit toward the stands at Comiskey Park had actually landed.

In the darkness, the Apache sent up smoke signals to let it's protest of it's treatment be known.

A quick dash to the basement, and I burned my hand on a hot and throughly devastated 15 amp fuse.

Back in the shack the receiver and RTTY gear came back to life, but the transmitter was kaput. An FSK signal poured out of the speaker. A slight twist of the BFO tweeked the signal in, and the printer sprang to life.

WA9QMB WA9QMB WA9QMB, WHAT HAPPENED??? WHERE ARE YOU??? UR SIGS 5 BY 9. HAVE TRAFFIC FOR CHICAGO, QTC 5. HOW COPY, OM??? K K K

That was pretty typical, actually. Soon after, the Apache was augmented by a BC-610 (would you believe the Apache served as a VFO for it? The VFO in the BC-610 wasn't stable enough for RTTY, and the guys got tired of chasing me all over the band, and told me so!).

A BC-610, run on 110 VAC and powered by a 15 amp lighting circuit, was a world class fuse melter. I started a LOT of QSOs, and was able to finish very few of 'em. High school kids are insane.

I did make an interesting discovery about RTTY tho.

On CW, every time a DX station showed up on 20 metres he got mobbed.

On RTTY, I saw MANY of them call CQ repeatedly and never get an answer! Working DX on RTTY was like shooting fish in a barrel.

73's,

Tom, K9TA

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: w7ni@teleport.com (Stan Griffiths)
Subject: Re: RE>Re- CAPCITANCE METER WAN
Message-ID: <199510110744.AAA13394@desiree.teleport.com>

>
> RE>Re: CAPCITANCE METER WANTED 10/10=
/95

>For low capacitance values, the old Tektronix model (Stan Griffiths plea=
se
help)=20
>is great. It was originally used to check time base components during s=
cope=20
>calibration. It is a small, hollow state, analog meter about the size o=
f a=20
>410C, and is usually available for a song. I have two of them, but for =
the
life=20
>of me I can't remember the model #.
>
>   73, Scott
>
>-------------------------------------

Yes, I'm here and listening. You are talking about the Tektronix Type
LC130. (I have two of them also.) It is great down to about 1 pf which =
is
1/3 of the 3 pf scale on the analog meter. The largest reading is 300 pf
which is full scale on the largest range. You can extend the range of th=
e
LC130 some by putting a known capacitor in series with the capacitor unde=
r
test. It also does microhenries from about 1 to 300. I bought a handhel=
d
capacity meter at Dayton a couple of years ago so I would have something =
I
could test electrolytics with. Between those two, I am well covered. I
paid about $50 for the handheld meter. I think there are a bunch of them
around, not hard to find.

Stan   W7NI@teleport.com

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: steve@hi.com (Steve Byan)
Subject: regen AF choke plate loads
Message-ID: <v02130513aca45e796f3e@[140.243.30.128]>

I've been looking at some designs for regenerative detectors lately. (Been
dreaming about building one, when I get a round tuit.) I found two
references that use AF chokes as plate loads for the detector rather than
transformer couping to the audio amp stage. One is the three tube
battery-operated shortwave receiver in the RCA Receiving Tube Manual #RC-19
(the one reprinted by AES) and the other is the 1959 ARRL Handbook in the
section on "Regenerative Detectors".

Both references call out huge values for the AF choke - 300 to 500 Henries. I've never seen a choke this big - is this a typo? Where can I find a 500 Henry choke? Is there an advantage to using a choke rather than an interstage coupling transformer?

Regards,
-Steve

Steve Byan
Hitachi Computer Products (America), Inc.
1601 Trapelo Road
Waltham, MA 02154

internet: steve@hi.com
phone: (617) 890-0444
FAX: (617) 890-4998

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: Al Klase <alklase@village.ios.com>
Subject: Re: regen AF choke plate loads
Message-ID: <Pine.BSD.3.91.951013150459.9018A-100000@village.ios.com>

The reason for the large inductance value is to provide an optimal plate load when a pentode is used as a detector because its plate impedance is quite high. The usual way to get such inductance was to connect the primary and secondary of an interstage audio transformer in series (phasing counts!). This will get you into this neighborhood.

A lot of successful regens simply use a resistor for the plate load. I think the key here is to have plenty of gain in the audio stage to make up for the sub-optimal coupling. The choke approach is probably a good idea if the audio stage is a single triode.

73, Al - N3FRQ

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: okasb@shoe.mtv.gtegsc.com (Bob Okas)
Subject: Re: regen AF choke plate loads
Message-ID: <9510132029.AA19473@shoe.mtv.gtegsc.com>

Al, N3FRQ, wrote:

> The reason for the large inductance value is to provide an
> optimal plate load when a pentode is used as a detector because its plate
> impedance is quite high.

If I remember correctly, the National SW-3 has a 16 Hy choke as the detector load and I've always puzzled over this since the impedance varies as a function of frequency. At 1Kc, this translates to an impedance of just over 100K, at 100 cps, it's 10K. Substituting a 100K resistor introduces a higher DC drop than the choke, but it keeps the AC impedance constant, which should be a good thing, right?

In my yute, I converted Radio Shack's One-Tube receiver (1T4 on a P-box base) from a simple grid-leak to a regen. I obtained quite satisfactory results from it using the stock plate load (47K?) and a pot in series with it to vary the feedback. How would a choke improve performance?

Bob - N3MBY

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: lhalliday@creo.bc.ca
Subject: Re[2]: Pre-Sarnoff FM B'dcast Band
Message-ID: <9509128135.AA813535291@mail.creo.bc.ca>

Jerry writes:

> Here in Canada, I just found out that the radio authorities of long
> ago, assigned the prefix of VE9 to some commerical stations. The
> VE9 is an amateur radio prefix and was unassigned until it was
> requested by the Province of New Brunswick in 1993.

VE9 was the prefix for Canadian experimental stations. One of the more famous was a pioneering TV station in Saskatoon - check your tape of Magic Time (the CBC's documentary about Canadian TV history).

The first non-experimental Canadian TV station was a pirate - a chap in Quebec who televised family photographs and things...

73 from Burnaby,
laura VE7LDH

Email: lhalliday@creo.bc.ca / ve7ldh@amsat.org

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Andy Wallace <wallace@mc.com>
Subject: Rochester/Heath/ARC updates / cathode key VFO?
Message-ID: <9510110541.AA01192@kali>

I have gotten multiple emails and so I thought a broadcast to The List

would be okay...

First off, I do not know who had the NCX-5 vfo. I'm sorry I didn't=20
take down his name, now, especially since I would consider an=20
NCX-5 myself! The guy was in the stall at the bottom of the hill,
not too far from the racetrack. Across from him was the KWM-2A and=20
51S-1, and the guy also had the Apache/Mohawk and Johnson Courier
amplifier. If ANYONE who attended Rochester NH knows who this=20
oldtimer is, please email me. I will pass on the info.=20

Second, I do have Rick, WA1DEJ's phone number now. It is a 617
number and it has been in the Yellow Sheets several times. I don't
want to broadcast it, but I have passed it on to several people who
have asked. (I guess I want them to have a fair shake at getting
whatever they want from Rick. Please keep me in mind if you have to
resell the 32V-3.) <grin>

The ARC transmitters I got are almost twins. One is used, and the=20
grey has darkened. The other is almost new (someone had dropped it=20
before I got there, and one front corner is slightly bent). One is
T-13A, the other is T-366A, and they both use three 5763s. One of them
has a sort of brass knuckles arrangement around the tubes. I am awaiting
info on these, but if someone on the List has been looking for them,=20
make an offer -- I picked them up in case someone does want them.=20

I cleaned the J-36 base tonight (left the hardware as is...it looks
old but clean) and adjusted it. I dare say the action on this is=20
quite comfortable, possibly more so than the Original Deluxe I bought
new a little while ago! I think it's the thin triangular paddles that
do it.=20

The Heath Two-er I got for $21 total is very clean. It's missing the Heat=
h
emblem, though -- anyone got one? And isn't 144.44 the calling freq? I ha=
ve
a rock for 8.025..that gets me (x3x3x2) to 144.45....think 10 kc off
would make things too far off? I suppose I could try pencilling the=20
rock down 0.56 kc... Is there much 2M AM activity in the Boston=20
area?

Well, I may be at the MIT flea coming up and if I do see the=20
NCX-5 VFO I will definitely get the info this time! And if you
have one for sale, better post it to the List...sounds like a=20
hot item right now! :-)

One last thing. I got the caps I needed for the Trio VFO-1. Now what
I would like to do is mate it with the 2-NT, which provides for cathode
keying a VFO (turning it on with the antenna relay circuitry). I assume I=

=20
should disconnect the cathode of the output tube from ground (cap and
resistor in parallel here) at the ground side of the resistor, and run th=
e=20
resistor to the cable from the 2-NT? (My bro says I should put an=20
RF choke in series with the resistor first...what's the proper value?)
Any info appreciated. It means one less knob to flip when I go into
transmit.=20

--Andy
wallace@mc.com

P.S. Thanks for the kind comments about my flea reports...I'm glad
you like reading them!

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: pmills@cyberhouse.com (Phil Mills)
Subject: rtty questions???
Message-ID: <199510121356.IAA09464@ns.cyberhouse.com>

I need some advice and assistance from those of you with RTTY
experience. First, to start off with a little humor, I have fond
hopes of someday having an RTTY operation using an old electromechanical
machine. I had a Model 19 back when I was a kid but I only used it
as a typewriter in local loop operation because I could not afford
the parts to build the demodulator.

At a hamfest some months back, I purchased for the princely sum of
$1 a box which I assumed at the time to be a homebrew keyer/demodulator
that I could use for parts. Upon further examination today, I find
the following:

1. A front panel decal "ST-5A", a 0-1 milliamp meter, various switches including one to switch between 170 and 850 frequency shifts.

2. The interior contains three pc boards, one obviously a power supply, another one a ?? (possibly the freq. shift keyer?) and a slightly larger one with two torroids on it which I assume to be the demodulator. This board is also labeled HAL ST-5.

3. The power transformer is a Thordarsen (sp?) labeled HAL ST-6 in addition to the Thordarsen name and number.

Can anyone tell me exactly what it is I have? Can anyone suggest a
source for documentation? Is this device suitable for use with a

"real" teletype machine? BTW, I don't mean to demean or belittle
in any way those who choose to use PC-based alternatives. It is just
that I have earned my living on a daily basis for almost 30 years
working with computers large and small and I really prefer something
else for a hobby.

thanks,

Phil Mills, AB5TH
pmills@cyberhouse.com
713-482-2763

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: Jeffrey Herman <jeffrey@math.hawaii.edu>
Subject: Re: rtty questions???
Message-ID: <Pine.SUN.3.91.951013082826.23399B-100000@kahuna>

On Fri, 13 Oct 1995, Phil Mills wrote:
> First, to start off with a little humor, I have fond
> hopes of someday having an RTTY operation using an old electromechanical
> machine. I had a Model 19 back when I was a kid but I only used it

Oh gosh, have we reached a point in time where this would be considered
humorous? I left the Coast Guard in 1980 - we had nothing but EM TTY
machines still clanging away at that time. It's only 15 years later!

Jeff NH6IL

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: rtty questions???
Message-ID: <Pine.ULT.3.91.951013150425.9504A-100000@admin.aurora.edu>

Phil - you have a ST-5 by the sound of it. Yes, as I recall it should
connect to a TTY machine directly. I have the documentation at home
and will look at it tonight and get back to you.
Bob (Another BA RTTYer) K9EUI

On Fri, 13 Oct 1995, Phil Mills wrote:

> I need some advice and assistance from those of you with RTTY
> experience. First, to start off with a little humor, I have fond
> hopes of someday having an RTTY operation using an old electromechanical
> machine. I had a Model 19 back when I was a kid but I only used it

> as a typewriter in local loop operation because I could not afford
> the parts to build the demodulator.
>
> At a hamfest some months back, I purchased for the princely sum of
> $1 a box which I assumed at the time to be a homebrew keyer/demodulator
> that I could use for parts. Upon further examination today, I find
> the following:
>
>   1. A front panel decal "ST-5A", a 0-1 milliamp meter, various
>   switches including one to switch between 170 and 850
>   frequency shifts.
>
>   2. The interior contains three pc boards, one obviously a
>   power supply, another one a ?? (possibly the freq. shift
>   keyer?) and a slightly larger one with two torroids on
>   it which I assume to be the demodulator. This board is
>   also labeled HAL ST-5.
>
>   3. The power transformer is a Thordarsen (sp?) labeled
>   HAL ST-6 in addition to the Thordarsen name and number.
>
> Can anyone tell me exactly what it is I have? Can anyone suggest a
> source for documentation? Is this device suitable for use with a
> "real" teletype machine? BTW, I don't mean to demean or belittle
> in any way those who choose to use PC-based alternatives. It is just
> that I have earned my living on a daily basis for almost 30 years
> working with computers large and small and I really prefer something
> else for a hobby.
>
> thanks,
>
> Phil Mills, AB5TH
> pmills@cyberhouse.com
> 713-482-2763
>
>

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: don merz <71333.144@compuserve.com>
Subject: S-39, HQ-140-X, R-388, PP-235 FS
Message-ID: <951011150109_71333.144_DHB30-3@CompuServe.COM>

 Boatanchors For Sale

 CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228.
          412-234-8819 (weekdays, EST or leave a message anytime).=20
          71333.144@compuserve.com

Hallicrafters S-39 general coverage receiver. Portable AC/DC set circa=20
1945. Original olive drab powdercoat paint. This one has an excellent=20
front panel, decent cabinet paint, original knobs (in a style unlike=20
ANY other Hallicrafters radio) and a clean dial. The whip antenna that=20
pulls out of the top is intact but the leather handle that should be on
top is missing. Clean and working dial. Works okay but not excellent.
Original manual. $139

Hammarlund HQ-140-X general coverage receiver. 1954 vintage radio. Light
gray front panel, gray hammertone cabinet and brown knobs make for a=20
really classy boatanchor. This one has a near-mint front panel. Without=
a=20
magnifying glass, you can't find a mark on it. The cabinet is excellent=
=20
or better too. The most noticable mark is a brush mark on the curved
right front edge of the cabinet. This radio sparkles! Better yet, it=20
works as good as it looks and is an excellent performer. Absolutely
exceptional quality in every respect. $199

Hammarlund matching speaker for the HQ-140-X. This doesn't look like the
correct match but this is the speaker my Allied catalog shows with the
140-X radio. This one is not as nice as the radio but still very good.
With original Jensen driver. Great sound. $55 (I will not sell this
until I see if the buyer of the 140-X wants it).

Collins R-388 receiver. Gernal coverage military version of the 51J2 (as
stamped on the rear apron). Rackmount, no cabinet. With all covers=20
and original manual. Has bad hum in audio and I was going to have=20
Frontier rebuild the plug-in electrolytic filter cap but I never got
it done. Otherwise works reasonably well. The front panel is very good=20
but not excellent with slight chips at the panel edges. The military ta=
g
has been removed. All original knobs and dials. Dial and drum work=20
correctly. $240

Military PP-235 power supply. The holy grail of accessories for the back=
pack
radio collector. This is the vibrator supply for the BC-1306 and GRC-9=20
radios. Field gray finish is scruffy looking. But it is like new inside
with spare vibrator pack and so forth. Untested. This is the only one =
I've
ever seen. $199

Kenwood HS-5 headphones. Stylish, high quality phones that are very effe=
ctive
and comfortably let in outside sounds. Like new-in-box with paperwork. =
Used
maybe 1 hour. $40

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995

From: "Terry O'Laughlin" <OLAUGHLIN@vilas.uwex.edu>
Subject: SCR-522 test sets and training manual
Message-ID: <MAILQUEUE-101.951012150459.1184@vilas.uwex.edu>

Someone from BA-land contacted me a while ago about SCR-522 stuff for a restoration. I found two test sets - wooden carrying cases containing a test control box, manuals and various gizmos. I also located a third test control box and manual.

The training manual is very interesting. It is not your typical military bound manual. It is a mimeograph put together in the 1940s at Truax Field here in Madison, WI. It's marked "RESTRICTED" and appears to be designed to train technicians in the operation and repair of the SCR-522. It is workbook form, but nothing has been written in it. The pages are getting a tad yellow but it's in good shape.

If anyone wants this stuff, please contact me. Preference will be given to the guy doing the restoration project.

73   Terry O'   WB9GVB

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Several Misc Items
Message-ID: <Pine.ULT.3.91.951010174410.824A-100000@admin.aurora.edu>

1) I have a mil surplus receiver (model unknown) that covers 200 to 1500 kHz in 4 bands. It is about 8 inches square on front and about a foot deep.

2) I have a Gertsch FM-3 Hetrodyne Freq meter. It's fundamental range is 20-40 MHz and it has a solid state harmonic unit that enables it to cover 150-170 MHz and 420-480 MHz (The multiplier has been retuned so it covers 140-160 MHz). It operates similarly to a BC-221 except the dials are direct reading.

These 2 items are for sale/trade.

3) I am in need of a schematic & info on a Robot model 70 SSTV converter. Any help appreciated.

Bob, K9EUI

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: Small 28V ARC transmitters - VHF?
Message-ID: <Pine.ULT.3.91.951010171751.6132B-100000@admin.aurora.edu>

On Tue, 10 Oct 1995, Paul V. Gregory wrote:>

>
> It began last month with a single, inexpensive T-20. Thereafter, his
> cravings worsen--he must have another...and another:
> >Just got a pair of identical twins, ARC Corporation 28V aircraft
> >transmitters....Any hints as to the age/power/freq range/xtals required
> would be
> >helpful.
>
>
Could you be talking about the T-23 / ARC-5 that covers 100-150 MHz?
If so, the xtals are 1/18 the operating frequency.
CHAN A = 100-124 MHz
CHAN B = 122-146 MHz
CHAN C = 122-146 MHz
CHAN D = 132-256 MHz

I believe they were about a 10 watt rig. I had one back in the 60's
and if I remember correctly, I replaced the final (832) with a 829-B
and ran around 50 watts.

I have some conversion data & schematic if you're interested.

Bob, K9EUI

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Andy Wallace <wallace@mc.com>
Subject: Re: Small 28V ARC transmitters - VHF?
Message-ID: <9510110548.AA01203@kali>

----- Begin Included Message -----

From: afpgreg@state.me.us (Paul V. Gregory)
Subject: Re: Small 28V ARC transmitters - VHF?

It began last month with a single, inexpensive T-20. Thereafter, his
cravings worsen--he must have another...and another:

Yes, sad to say, here is another case of...ARCaholism.
=20
----- End Included Message -----

Hey! It's nothing like that! I'm innocent! It's just like those prophylactics I was picking up at the drugstore for ... my DAD! Yeah, that's it! Like that!

Like I said in the last post, the VHF ARCs are up for grabs, but I may wait until some promised specs come through. The 3-4 Mc one is M I N = E.
I just have to build up a PS...I guess that minor hassle alone will=20 keep me from "collecting" ARC-5s.=20

But I tell ya. I am having more and more respect for the mil gear. But I guess if they all ran off of 110V they'd have been swiped lik= e
crazy.=20

73 es keep those olives....drab!
--Andy
wallace@mc.com

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Solid state audio for R-392
Message-ID: <9510101837.AA00833@bock.ih.att.com>

OK, but after you rectify the AC at the module (half wave),
you have to get the ripple out to some extent. A series resistor
with a BIG 'lytic on each end may be good enuf. Otherwise you need
a series regulator pass transistor.

Luckily you can design the regulator as a "capacitor multiplier" such
that its output voltage rises with the input. So with 28VAC you can get
more than 28 VDC output (maybe not much), and with 28 VDC you'll
still get 24 VDC.

Meanwhile, the existing module still puts out plenty of audio with a mere
24 VDC supply.

If you want really good audio, why not replace the tube or module with
an octal plug that takes the grid signal to the unused pin on the power connector,
and use an outboard amp?

BTW, in case anyone's confused, with the 26A7 tube in place, B+ DOES go to its plates thru the output xformer, so boosting the B+ will boost this tube also, for more sound and lots more heat. The SS module has an impedance-matching xformer that feeds the output xformer and blocks the B+, so as-is it receives no benefit or injury from boosted B+.

Another approach for a new SS module would be to use power VFETs in the output, to work directly into the original xformer and take advantage of B+ boost. Should deliver as much output power as the tube, tho not much more (an SS module with built-in xformer can in theory deliver lots more power).
73, mike k w9nrd

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: Solid state audio for R-392
Message-ID: <9510101905.AA00855@bock.ih.att.com>

I'll second Bobbi's rating of the LM386 as a well-behaved chip, having used it on perfboard with copper foil "wings" and never having any trouble with it. Designed for a single supply (no B-) too.

However, a problem with any plug-n-play R392 module is that it must output thru the existing push-pull output xformer, which is of course high-impedance for tube plates. So an LM380 or whatever would need a "backwards" transformer to get up to the requried output impedance.

In fact, the existing module already has one, plus an input driver xformer too! Must be really tight inside that can! Impressive that any decent sound makes it thru all 3 chunks of iron.
73, mike k w9nrd

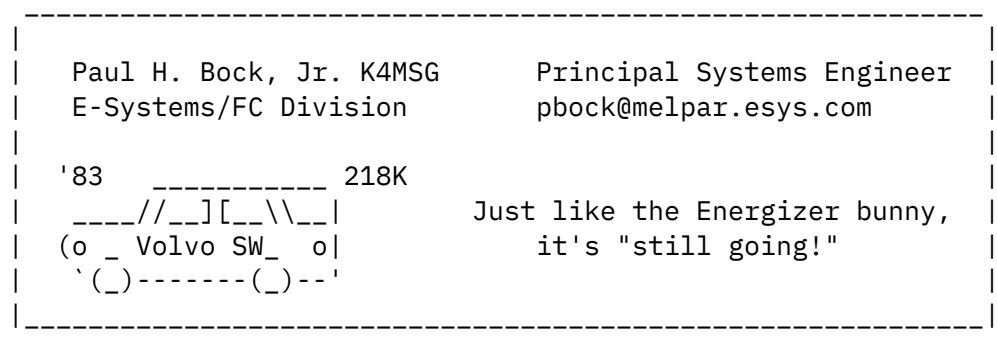
From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: pbock@melpar.esys.com (Paul H. Bock)
Subject: Some BA-related trivia
Message-ID: <9510111259.AA00481@syseng1.se.melpar.esys.com>

     Heard this one on the radio commuting in to work this=20
morning:

     What year was the last hand-cranked local telephone system=20
taken out of service in the U.S.? In what state was it located?

73,

Paul, K4MSG



From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Gale Carlisle <gcarlisl@cln.etc.bc.ca>
Subject: SP-600 need filtor choke and diversity info
Message-ID: <Pine.3.89.9510102306.A11529-0100000@cln>

Have recently picked up HAMMARLUND SP-600 (J-22) with modification by Technical Material Corp. DMK-4 Diversity Reception modification.

Need manual or info on hookup and operation of reciever. Has 6J6 osc with 2 position switch marked M or S with BNC output marked in pen HFO. Also 2 position switch with M or S conected to V6 _ V8 fixed crystal oscillator with output BNC connector marked IFO. This unit also has a BNC connector in place of BFO (INJ) control level pot.
=09
Any info in regards to the above modification would be very much appreciated. Also need the following power supply filtor choke part no. 31031-2, 20 hy, 440 ohm, 535 wv.

Thanks in advance Steve Carlisle
VE7AHL

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: KS0F@aol.com
Subject: Still hope! Life is good! etc.
Message-ID: <951013154036_123252454@emout04.mail.aol.com>

Greetings,
I had heard of a lady who was a no code tech who had just passed her 20wpm code test and was studying to upgrade. She had no equipment but was fascinated with CW. I had two HamKey paddles so I sent one to her through another ham.
Couple days later her hubby informed me on the radio (he is

also a no code tech) that he had an old radio that he had just acquired. He said it was mine if I wanted it as he knew I "messed with the old junk" and he certainly didn't want it. He had just bought her an Icom 735 for here first rig (cw filter and built in keyer of course) and was surprised that a stranger would give something away like the paddles. They were having problems with the new used rig and he wanted to get me to look at it for them. I said I would be glad to and he said he would bring the old radio by when he came with the Icom. He came out a couple nights ago and left the Icom which I worked the next day and got it all ready to go for him. He also left me my new HRO 50T with calibrator!!!!! It don't work and needs lots of cleaning but has not been "monkied" with. Only got one coil but the chances of getting about 6 or 8 more are good! I have had a speaker here waiting for this receiver for several years!

Look around, you must have something to give away. It works great!

W7XK also a subscriber to this list called me and said he had just sent his HRO 50 manual. He said he would find another. This is the original! not a copy! He and I spend a lot of money on UPS giving each other stuff,,,been going on for several years now.

My S-line is still for sale,,,,only reason I don't just give it all away is I don't have room in my garage for all the stuff I would get back for free when I did!!!

What high prices? 73 de KS0F

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: jproc@worldlinx.com
Subject: Re: Surplus from W.J. Ford
Message-ID: <Chameleon.4.01.2.951010164413.jproc@>

Dear BA's,

I forgot who sent out the original post about W.J. Ford Surplus, but I have to thank that person. For the last year, I have been looking for some Amphenol series 26 connectors with no luck until I sent them an E-mail on Oct 7. A response sent on Oct 8 indicated stock and half the price that I would have paid for them at one of the Toronto surplus stores.

It looks like they are geared up for mail order and I'm impressed so far. Being situated in Smith Falls Ontario makes them very inaccessible from Toronto (about a four hour drive) but between being on the Internet and being geared up for mail order, they look promising so far. Also, I took a look at their Web page and there seems to be a rather healty selection of BA's.

That's my 2 cents worth of input from a potentially satisfied customer.

Regards,

Jerry Proc, VE3FAB
Radio Restoration Volunteer
HMCS Haida
E-mail: jproc@worldlinx.com
Toronto, Ontario

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: neal.griggs@rodent.isdn.net (Neal Griggs)
Subject: suspend
Message-ID: <1e5.13792.1000@rodent.isdn.net>

suspend

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: John Shriver <jas@shiva.com>
Subject: Re: Tek 130 LC meter
Message-ID: <199510111332.JAA11766@shiva-dev.shiva.com>

Speaking of the Tek 130, does anyone know exactly how it's guard function works? I have a Tek scope calibration procedure that calls for using the guard connection on the 130. However, I don't have a 130, but I do have a GenRad 1650-A impedance bridge. It doesn't have any guarding facilities.

I suppose I could buy a Tek 130, but then I'd also have to buy the "delta calibration standard" for it. I've seen several, but once I decide I want them I'm sure they would both become unobtainable!

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: jcreid@CCGATE.HAC.COM
Subject: Tek L-C meter
Message-ID: <9509108133.AA813365713@CCGATE.HAC.COM>

I think the meter Scott is referring to is the Tek Type 130 Direct-Reading L-C meter. It can measure inductance up to 300 uH and capacitance up to 300 pF. It cost $235 in my 1968 Tek catalog.

-Jim N6SVS

jcreid@ccgate.hac.com

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: MODSTEPH@ACS.EKU.EDU
Subject: Test message
Message-ID: <01HWCGRTOG2A00120M@ACS.EKU.EDU>

TESTING -

Have received no messages for a day - very unusual for this place.

Just trying to see if this one comes back to me...

73, Al N5AIT

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: That "other" crystal, problems
Message-ID: <Pine.3.89.9510131012.A7645-0100000@indy3>

Hi!

   I recently bought a pair of crystals, one 80m FT-243 and a 160m in the=
=20
"other" (sealed) case style, for doubling into 40 and 80 in a one-tube=20
transmitter.

   The rig's a straightforward Frank Jones "regenerative" 6L6, just a=20
tuned-plate crystal oscillator with a bit of feedback--cathode is lifted=20
above RF ground by an RFC, bypassed with a small (220pF) mica to ground,=20
and gets a bit of plate energy via a 10pf condenser.

   The 80m fundamental rock seems to work FB--a nice looking waveform on=20
7125, confirmed by the freq counter. But the 160m crystal, no dice! I=20
can get 80m output with the 80m crystal, nice dip in currrent, so the=20
plate tank is hitting the band--but with the 160m one, all it'll do is=20
triple.

   ...My present guess is there's not enough RF (at 80m) for the 160m=20
crystal; the grid resistor's a little small and I haven't tried putting a=
n
RFC in series with it, either. But I was wondering if anyone else has ha=
d

problems with the "modern" crystals--the holder ID escapes me. It's something like HC-17; anyhow, it looks rather like an HC-6 can but has 1/2" pins like an FT-243. (Hmpf, wish they still made "doorknob" crystals!)

If anyone has some insight, I'd appreciated a Cc: direct to my e-mail address, as I've not seen anything from the BA-list for the last two days and it could be the listproc has kicked me off or something.=20

73,
--Bobbi
rbarmore@indy.net

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: That "other" crystal, problems
Message-ID: <9510131841.AA02127@bock.ih.att.com>

Hi. The BA List was silent yesterday, but is delivering the goods again today, so I suspect a temporary outage at Jack's site.

I seem to remember that many "modern" xtals were made to run at the 3rd harmonic rather than the fundamental, which may mean they skip the 2nd harmonic. Vibrating plates and their holders can certainly be optimized for odd over even harmonics.

But I'm surpised that such a low freq xtal (160m) would be made that way. When I think of 3rd harmonic xtals, I think of 8 MHz jobs that output on 25 to be doubled up to 6m, or 9 MHz jobs to triple out on...oops, family newsgroup :-)

Your posting serves as a warning to me. My KWM2 expects its 1st conversion xtals to do 2nd harmonic for 20m and up. When I start hunting rocks to do 30 and 18m, I'll have to make sure I don't get stuck with odd-harmonic-only jobs.

In fact, I think a lot of xtals marked with high freqs, say 42 MHz, are really 14 MHz jobs at heart, but intended for an oscillator that encourages what we pipe organ freaks call "overblowing the 12th". If your kids studied clarinet you know too much about this already :-)

73, mike k w9nrd

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: edrk@ix.netcom.com (ED KOWALSKI)

Subject: trouble
Message-ID: <199510130203.TAA22717@ix.ix.netcom.com>

Have not received any BA at all today. Are we off the air??

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: dmedley@indirect.com (David Medley)
Subject: Tube Bargain FS
Message-ID: <199510120536.WAA13818@bob.indirect.com>

Here is an inventory of a box of tubes. At least 50% of these appear to be NIB and the remainder are in the original boxes but they have been opened.
1B3,1C6(3),1C7G,1H6G,1H5GT(2),1H6G,1K3,1LH4,21GY5,25L6GT,2B7,2E34,2J38(7),32(20,33,34,35/51,37(4),38(6),39/44(4),41,55,56,6A6(5),6AR6,6B6G(4),6BQ6,6D7,6F8G(3),6JE6A,6Q7G,6Y6G(6),76(2),77(2),78(5),79(2),85(1),89(8),OZ4,VR-150/30

I make that 89 tubes. What about 20c per tube plus $20.00 shipping and packing or in round numbers $35.00? Can't beat that.
Dave KI6QE

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: midshires@cix.compulink.co.uk (Andrew Emmerson)
Subject: Tube manufacturing in Europe
Message-ID: <memo.632744@cix.compulink.co.uk>

>Is Mullard still manufacturing tubes??

Not to my knowledge; the last thing they made was CRTs for TVs.

>What about other western European makers??

I believe several firm still make high-power transmitting tubes, also plumbicon and vidicon TV camera tubes. But not normal radio and TV tubes.

>Or is tube manufacturing now restricted to China and Russia??
No, VAIC VALVE in the Czech Republic is remanufacturing classic pre-war designs now and my guess is that other firms may well re-enter this market. One British firm currently buys the bulk of the output of a Chinese firm and has paid the development costs of remanufacturing several major tube patterns.

73, Andy.

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: HAMRLUND@aol.com
Subject: tube question
Message-ID: <951010230103_41406723@mail04.mail.aol.com>

anybody in the group, have any info on a Hytron HY51Z tube?
what is it?
used for?
value? new but wrong box

thanks
robert

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: tube question
Message-ID: <Pine.ULT.3.91.951011065207.29487B-100000@admin.aurora.edu>

It is a triode transmitting tube but that's all I can find. Looking in
the older ARRL handbooks, they just give the pinout but no data.

On Tue, 10 Oct 1995 HAMRLUND@aol.com wrote:

> anybody in the group, have any info on a Hytron HY51Z tube?
> what is it?
> used for?
> value? new but wrong box
>=20
> thanks
> robert
>=20

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: David Adams <dave@flowserver.stem.com>
Subject: Tubes needed
Message-ID: <9510122118.AA28875@flowserver.stem.com>

I am reestoring an old Hallicrafters S-27 and need the following tubes:

2 6V6
2 6H6
2 1852
1 1853

1 6SK7
1 VR150
1 6J5
1 6C8G
1 5Z3

acorns:

1 954
1 955
1 956

If you have any you want to sell, lemme know!

73 de dave, n9uxu@n0ary.#nocal.ca.usa
internet: dave@flowserver.stem.com

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: Duncan Cadd <dcadd@luc.ac.be>
Subject: variometers etc
Message-ID: <9510121159.AA12054@alpha.luc.ac.be>

Greetings again - hey, the sun's out!

About that 'hambeurs' - I got something else which might interest BAers.

I also picked up for a quid a real conversation piece (or maybe even conversation stopper) an old variometer coupler which is certainly pre-WW2 but maybe not pre-WW1. I was told it came out of an old piece of medical apparatus but didn't think to ask more, it's nicely made, has a separate 'secondary' wound under the 'primary' of the outer tube and which primary is of course in series with the rotatable inner coil, so you have a variable inductance with a secondary on it - looks like it carried some power as the wires are THICK and very well cloth-and-something-very-brittle (perished gutta percha?) insulated. Fascinating thing, whatever its true purpose was, and in fact it has taught me a thing or two about construction of these things - I was already in the process of making my own variometers from PVC drainpipe couplers!!!

A quick question - I've come across the term 'logarithmic decrement' - what is it, and why should one wish to measure it ?

73,

Duncan ON9CHU / G0UTY G-QRP 8117

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: steve@hi.com (Steve Byan)
Subject: Wayne Kerr B801 VHF Admittance Bridge
Message-ID: <v02130512aca45dd04787@[140.243.30.128]>

I picked up a Wayne Kerr B801 VHF Admittance Bridge the other day. Does anyone happen to have a manual, or know how to run this beast, or know what it is? I'm hoping it's something akin to the GR RF admittance bridges.

Regards,
-Steve

Steve Byan
Hitachi Computer Products (America), Inc.
1601 Trapelo Road
Waltham, MA 02154

internet: steve@hi.com
phone: (617) 890-0444
FAX: (617) 890-4998

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: dmedley@indirect.com (David Medley)
Subject: WE 717A tubes FS
Message-ID: <199510132046.NAA22952@ns2.indirect.com>

I advertised these four tubes for sale but all I got was a bunch of messages telling me what a poor tube they are/were. Does anyone want these dumb things or shall I take them to the landfill?
Dave dmedley@indirect.com

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: haynes@cats.ucsc.edu (Jim Haynes)
Subject: Re: WE Door Knobs
Message-ID: <199510131757.KAA11022@hobbes.UCSC.EDU>

>I have four WE717A doorknob tubes FS. Two are in the original boxes and two
>are unboxed. I have tested the heaters with an ohmmeter and all appear good.
>I advertised these on another forum and got no reponses which surprised me.
>Anyone here interested?
>Dave KI6QE

These are a 6AK5 in an octal base - are they used in anything except the VHF ARC-5 receiver?

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: WE Door Knobs
Message-ID: <9510132010.AA100396@csemail.cropsci.ncsu.edu>

> >I have four WE717A doorknob tubes FS. Two are in the original boxes and two
> >are unboxed. I have tested the heaters with an ohmmeter and all appear good.
> >I advertised these on another forum and got no reponses which surprised me.
> >Anyone here interested?
> >Dave KI6QE
>
> These are a 6AK5 in an octal base - are they used in anything except the
> VHF ARC-5 receiver?

If you are into regenerator playing they would make great detectors
hidden away in the middle of a GIANT industrial sized breadboard relay
socket.....(:+}}.....

73/ZUT DE NA4G/Bob

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: Michael.J.Knudsen@att.com
Subject: Re: WE Door Knobs
Message-ID: <9510132138.AA02186@bock.ih.att.com>

THese must look a little like the "doorknob" Loktal 7F7 jobs used
as oscillator & mixer in the SX-42 and SX-62(A) sets. Pretty cute,
the triodes lying on their sides. And they actually work, more or less,
at 108 MC.

Those WE 6AK5's sound like a retrofit job -- plug into existing gear
to raise the frequency range? 73, mike k w9nrd

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: dmedley@indirect.com (David Medley)
Subject: WE Door Knobs FS
Message-ID: <199510120539.WAA13841@bob.indirect.com>

I have four WE717A doorknob tubes FS. Two are in the original boxes and two
are unboxed. I have tested the heaters with an ohmmeter and all appear good.
I advertised these on another forum and got no reponses which surprised me.
Anyone here interested?
Dave KI6QE

From boatanchors@theporch.com Fri Oct 13 18:11:00 1995
From: Jay Coward <jayc@abpcad.sj.hp.com>
Subject: where are you
Message-ID: <199510122208.AA184695722@hp.com>

I havn't had a digest for two days now...getting kind of lonely...
--

```
  /_  _    HEWLETT    John Jay Coward         39201 Cherry Street    MS NK10
 / / /_/   PACKARD    jayc@abpcad.sj.hp.com   Newark, California       94560
    /      Communications Components Division 510-505-5614  Fax 510-505-5560
```


"I haven't heard anything like that since the orphanage burned down."
- Mark Twain on an opera performance

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: David Adams <dave@flowserver.stem.com>
Subject: wj ford web address?
Message-ID: <9510102101.AA26144@flowserver.stem.com>

My NeXt crashed prior to saving the bookmark, can
someone resend the url to me?

Dave

From boatanchors@theporch.com Fri Oct 13 14:33:00 1995
From: jproc@worldlinx.com
Subject: RE: wj ford web address?
Message-ID: <Chameleon.4.01.2.951010205548.jproc@jproc>

>can someone resend the url to me?

It's:

http://infoweb.magi.com/~testequi

Regards,

Jerry Proc VE3FAB
E-mail: jproc@worldlinx.com
Radio Restoration Volunteer
HMCS Haida, Toronto Ontario

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: pmills@cyberhouse.com (Phil Mills)
Subject: WTB: frequency counter
Message-ID: <199510111350.IAA05426@ns.cyberhouse.com>

I neew to acquire a good frequency counter for mostly HF use but if
it extends to VHF so much the better. Does anyone have any recommendatio=
ns
or anything for sale?

Primary usage will be in determining/setting frequencies when aligning
BA receivers and transmitters so it would probably need to range down to
100khz. Any comments or suggestions on this?

thanks for your help,
=20
Phil Mills, AB5TH
pmills@cyberhouse.com
713-482-2763

From boatanchors@theporch.com Fri Oct 13 17:19:00 1995
From: w7ni@teleport.com (Stan Griffiths)
Subject: Yet another estate find.
Message-ID: <199510110841.BAA22446@desiree.teleport.com>

Now I have an IF Amplifier in a can. The can is 2 1/8 inches high and 3/=
4"
in diameter. It will plug into a 7 pin miniture socket and is silver in
color. The box and printing on the can say it was made for the Signal Co=
rps
by Admiral Corporation, Chicago, IL. It also says it is a "AM 427/U" an=
d
the box also has the following number on it: 15176-PHILA-52

I will accept bids until October 15. I will need $2 plus your bid to shi=
p it.

Stan W7NI@teleport.com

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: Duncan Cadd <dcadd@luc.ac.be>
Subject: you can't stick it back on again?
Message-ID: <9510121145.AA13264@alpha.luc.ac.be>

Greetings, Anchorites, from a dull and warm Diepenbeek in N.E. Belgium!

I like this technology. A couple of nights ago, I had my first bash at crystal grinding. Picked up a handful of old FT171 xtals at a 'hambeurs' in Antwerp on Saturday, and set about shifting one with some wet-and-dry sandpaper. It looked OK, until I changed to a new sheet (the original was getting a bit 'glossy') and overshot by 1kc/s 8-{. But then, by rubbing some ordinary solder on the plate, the frequency went back down again by the desired amount 8-}. Rubbing the plate with ordinary toothpaste under a cold tap brought the activity right up, so after maybe 50 years of silence, this, plus its pals, plus an old 10X British Air Ministry xtal from 1935, are going to sing again like they once did. Now, doesn't that make you feel good?

And I thought they always said you can't stick it back on . . . . . I DO like this technology. Easily fettled with simple hand tools. It's user friendliness at its best, and the only operating system overhead is the glass of cold beer etc.

73,

Duncan ON9CHU / G0UTY   G-QRP 8117

From boatanchors@theporch.com Fri Oct 13 17:13:00 1995
From: haynes@cats.ucsc.edu (Jim Haynes)
Subject: [Q] about old VHF air frequencies
Message-ID: <199510120418.VAA00134@hobbes.UCSC.EDU>

Nowadays the VHF air frequencies are integral multiples of 25 kHz; but I can recall some olden days when this was not so. The military tower frequency used to be 126.18 (now 126.2). There used to be a C.A.P. frequency 148.14 (now 148.15). Question is, what was the frequency system earlier, and what was the rationale for it?

From boatanchors@theporch.com Fri Oct 13 22:06:00 1995
From: k1zat@bah.com

Subject: Re: [Q] about old VHF air frequencies
Message-ID: <Pine.SUN.3.91.951013172447.13098E-100000@booz.bah.com>

> frequency 148.14 (now 148.15). Question is, what was the frequency
> system earlier, and what was the rationale for it?

  If I remember right, in the golden days the spacing was
50 KC. Rationale -- beats me.

  jd